

DX News

• Serving DX'ers since 1933 •

Volume 61, No. 27 - July 18, 1994 (ISSN 0737-1659)



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From the Publisher ... The fifteenth edition of the NRC AM Log is in its final weeks of preparation, and you may reserve your copy now; details on page three. The good news is that the price is the same; the bad news, if you can call it that, is that Wayne needs a little help with updating information (see page 25) so that the Log may continue to be the most accurate listing of U. S./Canadian AM stations available. Other projects: The NRC Night Pattern Book is nearing completion; watch for an announcement sometime this fall for ordering information. And several other books are in preparation for release late this year or early next year.

A number of NRC'ers sent in answers to new member Jerry Slegh's question as to where the WELQ calls were located in 1947, and the consensus was that WELQ-1490 was located in Tupelo, MS. Thanks to Curt Engberg, Joe Kureth, Cary Simpson, and Doug (oops, the envelope is gone; I think it was Beard).

"RadioCom '94", aka "Radio Festival 1994", which had been organized by SCADS, is no more, according to Eric Cooper, but instead you still have your choice of the IRCA Convention (August 26-28, Aberdeen, WA; contact Bill Hardy at 2301 Pacific Ave. - Aberdeen, WA 98520-4527) or the NRC Convention in Nashua, NY (see page 47). (I'm still waiting for that coffee cup, but Eric says not to worry.)

Press release from TAB Books: Anita McCormick's new *Shortwave Listener's Q & A Book* contains a section on AM DX'ing plus excellent basic information on shortwave listening; just the thing for a beginner. The book sells for \$12.95; look for it in bookstores or order direct by calling (800) 822-8158.

Welcome to these new members ... Tom Tomlins, Springfield, OH; Mel Miller, Lancaster, PA (re-joins); Ed Boe, Oaklawn, IL; Henry Lazarus, New Orleans, LA (rejoins); William Gilbert, West Sayville, NY; Robert P. Swinn, Freedom, CA; Larry

A. Mann, Miami, FL; Jeffrey C. Galbaugh, Cincinnati, OH; T. W. Cairns, Bayside, CA.

Remaining DXN Schedule, Volume 61

#	Deadline	Pub. Date	
29.	Aug. 5	Aug. 15	30. Sept. 9 Sept. 19

DXN Publishing Schedule, Volume 62

#	Deadline	Pub. Date	
1.	Sept. 23	Oct. 3	16. Jan. 13 Jan. 23
2.	Sept. 31	Oct. 10	17. Jan. 20 Jan. 30
3.	Oct. 7	Oct. 17	18. Jan. 27 Feb. 6
4.	Oct. 14	Oct. 24	19. Feb. 3 Feb. 13
5.	Oct. 21	Oct. 31	20. Feb. 10 Feb. 20
6.	Oct. 28	Nov. 7	21. Feb. 17 Feb. 27
7.	Nov. 4	Nov. 14	22. Feb. 24 Mar. 6
8.	Nov. 11	Nov. 21	23. Mar. 10 Mar. 20
9.	Nov. 18	Nov. 28	24. Mar. 31 Apr. 10
10.	Nov. 25	Dec. 5	25. Apr. 14 Apr. 24
11.	Dec. 2	Dec. 12	26. May 12 May 22
12.	Dec. 9	Dec. 19	27. June 9 June 19
13.	Dec. 16	Dec. 26	28. July 7 July 17
14.	Dec. 30	Jan. 9	29. Aug. 4 Aug. 14
15.	Jan. 6	Jan. 16	30. Sept. 8 Sept. 18

DX Time Machine

From the pages of DX News:

50 years ago ... from the July 15, 1944 DXN: In the final report of the 1943-1944 contest standings, Norm Kernoodle was the winner with 286,156 points and Frank Wheeler second with 261,120 points. Joe Eaz, Brooklyn, NY reported a verie from KHBC-1230 for his 3rd Hawaiian.

25 years ago ... from the July 3, 1969 DXN: Ralph M. Johannis, Buffalo, NY noted that Ken Lyon, Akron, OH got married ... Wayne Heinzen was at the USCG Loran station on Sitkinak Island, Alaska for a year ... Geoff Fox sent him a copy of a WKYT-950 verie for a test he had heard ... and he welcomed new member Fred Osterman, Williamsville, NY.

10 years ago ... from the July 16, 1984 DXN: Gerry Thomas contributed an article entitled "DX'ing the 1984 Solar Eclipse".

2 AM Switch

Jerry Starr
c/o WHOT Radio
4040 Simon Road
Youngstown, OH 44512-1320

Status changes in AM stations, supplied by the FCC and listeners

CALL LETTER CHANGES

Old call	New call	Old call	New call
860 WHRT AL Hartselle	WYAM	1350 WLNH NH Laconia	WEZS
920 KDES CA Palm Springs	KISQ	1400 KBLX CA Berkeley	KVTO
980 KRXX MN Richfield	KFGF*	1400 WHIF NC Raeford	WMFA
1050 KNOB CA Frazier Park	KKGO	1410 WDTI MS Cleveland	WOHT
1150 KINT TX El Paso	KSVE	1480 WCNV NC Charlotte	WIST
1190 KBCO CO Boulder	KBLD	1480 WAJA NC Franklin	WPFJ
1280 WKXK GA Macon	WIBB	1580 WMTI PR Morovis	WGFE
1290 WPCF FL Panama City Bch	WDLP		

Notes: KRXX-980 call change to KEGE seems to dispute the reports that this station will be going off the air.

APPLICATIONS/GRANTS FOR NEW STATIONS

None

APPLICATIONS FROM EXISTING FACILITIES

640	WBOW	IN	Terre Haute: day power to 500 watts
740	WMIN	WI	Hudson: day power to 850 watts
780	WWOL	NC	Forest City: power to 10000 watts
900	WCEB	OH	Canton: reduce night power to 75 watts
1150	WCEN	MI	Mount Pleasant: delete night service, become D1
1400	KTUC	AZ	Tucson: powers to 1000/1000 (their CP for 757/757 is presently on the air but this was intended only as an interim operation until a new antenna site was built; this is an application to restore the station to full power from a new site)

GRANTS TO EXISTING FACILITIES

1060	WWZD	MS	Tupelo: relocate transmitter site
1370	KEFM	ND	Grand Forks: relocate transmitter site

OTHERNESS

640	WISZ	MI	Zeeland: silent station is ON THE AIR
760	WVNF	MA	Leicester: CP for 25000 (8600 CH) is on
800	WDSB	SC	Dillon: silent station is ON THE AIR
820	WYTA	FL	Largo: several reports on the FidoNet claim the new call here is WYTR for "Your Talk Radio". This is incorrect. WRFA changed to WYTA for "YourTalk Authority". Be cautious of items you may read on these computer nets; they often turn out to be partially or totally wrong.
840	KSDP	AK	Sand Point: despite the reports to the contrary this station is NOT silent, as it has continued to operate and relay programming from KDLG-670 most of the day (see last issue); however, KABN-830 IS silent and has been for about 5 years. this report from member Rod O'Connor in AK who can hear KSDP.
920	WKYD	AL	Andalusia: station is SILENT
1010	KZRC	OR	Milwaukie: a few reports have sifted in that this station changed calls to KXYQ. This is the call of their FM station that may very well be heard during simulcasts but I have no record from the FCC that the call has been officially changed from KZRC, the call that matched their "Z-Rock" format. The FCC has a record of missing call changes in their Public Notices so it is possible. Can somebody in that area confirm the actual licensed call on 1010?
1030	WQSE	TN	White Bluff: silent station is ON THE AIR

1040	KURS	CA	San Diego: CP for 370/47 on the air (log typo gave CP night power at 470 watts which is incorrect) A new CP modification has been granted to raise this night power to 63 watts so this station is now 370/63 U1
1130	KHTH	CO	Dillon: station no longer relays KNUS Denver
1200	WAGE	VA	Leesburg: CP to reduce day power to 5000 is on
1220	WCPH	TN	Etowah: this on-again/off-again station is again ON THE AIR (at least of this writing)
1250	WLEM	PA	Emporium: FCC has granted reinstatement of their CP to move to 650 kHz 5000 D1, so they evidently plan to make this change, CP had expired several years ago
1280	WFCY	DE	Scaford: station was briefly SILENT to rebuild its transmitter facility but is again ON THE AIR
1290	WTMC	FL	Ocala: station is SILENT
1340	KMYQ	LA	Bastrop: license CANCELLED and call DELETED
1400	WMFA	NC	Raeford: silent as WHIL; station is ON THE AIR
1470	WLNC	SC	Georgetown: silent station is ON THE AIR
1480	WIST	NC	Charlotte: silent as WCNV, station is ON THE AIR
1490	KMCW	MT	Great Falls: listed recently as a newly-granted station and call; this was actually an old CP that has now been CANCELLED and the call DELETED, all this from an FCC letter signed by none other than Mass Media Bureau Chief Roy Stewart, so we are taking this to be true. For now anyway.
	WJOC	TN	Chattanooga: silent station has new ownership and is expected to return to the air
1510	KMRF	MO	Marshfield: silent station is ON THE AIR
1540	WADM	IN	Decatur: silent station is ON THE AIR
	WPGR	PA	Philadelphia: CP for 50000/500 U4 is on, city of license is now Bala-Cynwyd, PA
1560	KLTI	MO	Macon: silent station has new ownership and is expected to return to the air

THANKS: David Lewis, Eugene Hinton, Wayne Heinen, Dave Schmidt, Rod O'Connor, J.D. Musco, Ed Krejny, Pat Agonia, and MSJ.

73 and Good DX

Jerry's BKF

Jerry Starr & Buffalo K. Foonman

The NRC AM Radio Log, 15th Edition, will be the most accurate listing of AM radio stations in the U. S. and Canada. Cross reference listings, and 3-hole punched for standard binders. Still only \$16.95 to U. S. and Canadian members; \$19.95 to U. S. non-NRC member; \$20.95 Canadian non-NRC member. Airmail: to Latin America, \$21.00; Europe, \$24.00; rest of the world: \$28.00.

You may pre-order from: NRC Publications - Box 164 - Mannsville, NY 13661 (NY residents, please add sales tax)

Domestic DX Digest

West: Bill Hale MTH112A@Prodigy.com

495 Creekview Drive - Meridian, ID 83642-3241

East: Dave Braun 73520,657@compuserve.com

11 Mill Bend Acres - Wyoming, DE 19934-9523

(Division line is
between East and
Central time zones)



DX Catches in the U. S. and Canada, with 24-hr. ELT

MEDIUM WAVE RAMBLINGS

□ DX is kinda slim (quantity, not quality) this issue. But we've been busy figuring mucho Graveyard reports and the Special area is always hoppin'. Received GY updates (with new records) from Morris Sorensen logged in Leaf Rapids, Manitoba (plus his new totals from Scarborough), Steve Ponder, logged from several locations, Don Trelford from Jamaica, J.W. Bay in Drexel Hill, Pennsylvania and Jack Woods on the Oregon Coast. See later on for details. Morris, what you added about CBLV was covered up by the postmark, so please re-submit.

□ Eric, after taking a deep breath, sez: "KJSL [-630] signed on at 0700 ELT on June 17, and billboards are already up around St. Louis. . . Their only competition on the AM dial is KSIV-1320, which airs a similar format. KFUO-850 has run its mix of information and light Christian music aimed at the members of the Lutheran Church-Missouri Synod since 1924, and financially troubled KXEN-1010 has fine-tuned once again, more toward a straight Contemporary Christian format, to compete with WCBW-104.9. This is evidence that not even Christian formats are immune from fragmentation!" (Eric, did you submit format information to Tony Fitzherbert? -pls) And Shawn jabbers: "Hey! This season isn't over yet. Two new ones in mid-June isn't bad. Lots of summer static to fight with, but it's worth it". Gray Scrimgeour was in Vernon, British Columbia for 3 days and took his TRF along. He tried for the new weather station mentioned in a recent *DX News* [see Issue 26, AM Switch, 1580 in Otherness - Fd] He had no luck, after several bandscans, and asks "Could it be on FM? Or not on yet?" And "Thanks", Gray for the Sony report. Jim Boehm, down San Antonio way, sent several interesting newspaper articles. One, concerning the sabotage of WOAI's audio equipment during the Branch Davidian trial, was labelled "terrorism" by FBI agents. The dastardly acts are alleged to have been the work of "out-of-town" TV people.

□ A BIG Welcome Aboard to all new members. Guidelines for reporting to the DDXD columns include to remember this is the place for real DX and late-breaking tips in your area, not bandscans. And, regardless of the method of reporting (we're on the info highway), arrange your loggings in frequency order divided into the sections seen here. Print neatly, type, or computer-generated reports are preferred (E-Mail, too). A note about postcards . . . it seems the post office likes to use the cancelling machines with the largest post marks on cards, so beware. If you need report forms, let me know. I'll get 'em to you free, for an SASE. At any rate, we wanna hear what you been hearin'.

□ There are some changes looming on the Graveyard DX Achievements horizon. More details to come. So stay tuned and get your logs in order!

□ Here are the deadlines for DDXD-W for the rest of Volume 61.

Issue 29 July 30

Issue 30 September 3

Bumper Sticker: My Tube Radio Can Flatten Your Transistor Model.

DDXD-East

REPORTERS

- TR-IL1 Thomas J. Reiser Champaign Sony ICF-2003 with built in antenna
TR-IL2 Thomas J. Reiser Box 5203 Chicago, IL 60680-5203 Sonee Eyccee-eff MMIII barefoot
EB-MO Eric Bueneman (NUIH) 631 Coachway Lane, Hazelwood 63042-1347
BH-WA Bill Hardy Aberdeen
SA-MB Shawn Axelrod 30 Becontree Bay Winnipeg R2N 2X9 ICOM R-70 w/PLAM board & 0.5, 2.4 & 4 kHz filter + 4' box loop or 100' lw
BW-OK Bruce Winkelman, AASCO Tulsa R6, KIVA loop, 2-90 ft wires, MWDX5
JB-TX Jim Boehm San Antonio R71A + world-renowned downspout special antenna
JE-MN1 Jon Ellis, Maple Grove good ole Sharp 8-band, but now with a Select-A-Tenna



- JE-MN2 Jon Ellis, Lake Itasca same ole Sharp 8-band, but now with a Select-A-Tenna
JE-MN3 Jon Ellis, Side Lake that same ole Sharp 8-band, but now with a Select-A-Tenna
JE-MN4 Jon Ellis, Duluth that good, same ole Sharp 8-band, but now with a Select-A-Tenna
JE-WI Jon Ellis, Webster you guessed it
GS-BC Gray Scrimgeour Victoria
DP-HI Dale Park Honolulu ATS-803A
Ed-ID Editor Meridian [*] News sources



478 East Bay Street
Charleston, SC 29403

SPECIAL

- 610 KDAL MN Duluth - Was full-service AC. Now full-service oldies, and Bohannan. (JE-MN4)
630 KJSL MO St. Louis - Back from two-month silence with Christian talk in C-QUAM Stereo. Slogans are *The Salt and Light of St. Louis* and *Talk Radio Hell Hates*. Many mentions of Crawford Broadcasting. Address is: 1215 Fern Ridge Parkway, Suite #220, St. Louis, MO 63141. (EB-MO)
730 KBSU ID Boise - Testing with 15000 day rig in S, but still fine-tuning the 500 watt night pattern. (Ed-ID)
890 WLS IL Chicago - Same format, but no longer // FM-94.7. WLS-FM is now a talk format geared at younger audiences. (JE-MN1)
910 WHSM WI Hayward - Now carries Unistar Oldies Channel NSP (still // FM-101.7), replacing Full Service AC. (JE-WI)
950 WJPC IL Chicago - Has changed to 2/3 rap, 1/3 slow UC format. Possible LMA may be in effect, but will have to verify. Legal IDs as WJPC FM/AM Chicago-Lansing (IL) and slogan is *106 jams*. (TR-IL) Broadcasting Partners Inc. reports its Broadcasting Partners of Chicago Inc. unit, has acquired WJPC and WJPC-FM in Lansing, Ill., for \$8 million from Johnson Communications, Inc. and entered into a local programming and marketing agreement on June 17. (Ed-ID*)
970 KHVN TX Dallas - Has been sold by Summit Communications to Granum Communications, Inc., along with its FMer KJMZ-FM. See also 600 and 1380 for related. (Ed-ID*)
980 KEGE MN Richfield-Minneapolis - Ex KRXX. Still simulcasting former sister KEGE-FM-93.7 with Modern Rock. Entercom (owner of 980) has probably entered into an LMA with Capital Cities/ABC (owner of KEGE-FM) to simulcast until 980 is sold, which will probably be a long time. Legal IDs are separate for AM and FM; the AM's ID is barely audible through explosions. Slogan is "The Edge." (JE-MN1)
1090 WAQE WI Rice Lake - Now in S. (JE-WI)
1200 WOAI TX San Antonio - Now carries *Larry King Live* through Westwood One, Monday-Friday at 2100 ELT. (JB-TX)
1250 KHBL TX San Antonio - New station slogan is *La radio Labia*. In local Tex-Mex *Tener Mucha Labia* means *To have the gift of Gab*, ie Talkativeness. Appropriate for this station's SS talk/news format taht is IDed as *La Cadena Trecenta*. A call to the station provided a person whose English was as poor as my Spanish, but I gather programming originates in Hollywood, California.(?) They carry the Houston Astros in BE. (JB-TX)
1270 WWWI MN Baxter - Uses slogan 3WI, kinda like 3WE. (JE-MN2)
WXYT MI Detroit - Has been acquired by Infinity Broadcasting Corporation (Ed-ID*)
1280 KYRO MO Potosi - Adds KTVI-2's 1700 CLT (1800 ELT) newscast, per promos on KTVI-2 St. Louis. (EB-MO)
1290 WBZT FL West Palm Beach - Price Communications Corp. agreed to sell this and its FMer, WIRK-FM, to American Radio Systems Inc. of Boston. (Ed-ID*)
1340 KANR ID Nampa - Local rumors have it that this station is moving to 1350 with 5kw days and 1 kw nights with U2, contingent on the sale of the station. (FA-ID)
1350 KSLQ MO Washington - Adds KTVI-2's 1700 CLT (1800 ELT) newscast //KSLQ-FM 104.5, per promos on KTVI-2 St. Louis. (EB-MO)
1430 KNSP MN Staples - Now relays KWAD-920 with low modulation. (JE-MN2)
W R T H MO St. Louis - Address is 8081Manchester Road, St. Louis, MO 63144, which is the same address as KIHT-96.3 and WIL-92.3. (EB-MO)

- 1460 KULA HI Honolulu - Ops, spoke too soon (see DXDX-W Issue 27)! Per news reports, **Burnham Broadcasting** has backed off buying KULA because Burnham itself is being bought by **Liberty Communications**. This station went silent around 11/93, airing MoR music (AM Only or Format 41) and CNN Radio news via Unistar. (DP-HI)
- 1470 WLOL MN Brooklyn Park - 6/18 2245 - Fair with St. Paul Saints vs Sioux Falls Canaries baseball. New call, ex: KBCW. Also NOS music // KLBB-1400. On-the-hour IDs as AM 1400 KLBB St. Paul-Minneapolis - AM 1470 WLOL. (SA-MB)
- 1510 KCTE MO Independence - Ex: KJLA, first noted here 6/13 0751-0800 w/The Team syndicated sports, *All Sports, All Day* slogan, and MANY ads. (BW-OK)
- KCTE MO Independence - 6/18 2225 - Fair with *The Sports Authority* KCTE-AM, the team covering sports like nobody can. *Kansas City's Tenu*. New call, ex: KJLA. (SA-MB)
- 1540 KXEL IA Waterloo - 6/1 2330 - Good with Jazz/BBD/NOS music & religion nowadays. No C&W music. (SA-MB)
- KXEL IA Waterloo - 6/21 0737 - With ads mentioning Waterloo, into oldies/standards, *The All New KXEL* slogan, then to talk show. (BW-OK)
- 1550 KPIX CA San Francisco - Along with their FMer, has been sold to **Group W Westinghouse**, which is converting them to news-talk. (Westinghouse owns KPIX-TV there). The KKII calls, format, and reportedly the music library are going to 100.7 San Rafael when Westinghouse releases them. (BH-WA) [And more...] I did some sample listening... during the World Cup game. They were playing classical music and I didn't catch an ID. (The next) morning I was more fortunate. Heard distinctly was: *This is KPIX and KPIX-FM, San Francisco*. (BK-CA) ... still classical music 2 evenings ago [6/30] when I last checked. (GS-BC)
- 1570 WBGZ IL Alton - Per verie, address is 1900 Homer Adams Parkway, Alton, IL 62002, in addition to the P.O. Box listed in the 1994 AM Log. (EB-MO)
- 1600 KLLZ MN Walker - Now relays KLLZ-1380 (as of 6/13), not FM-99.1 as other sources say, one of which is KLLZ-FM, which says it's simulcast on AM 1600 in its Log ID. (JE-MN2)

TIS & OTHER STUFF

- 1610 TIS MN Virginia - Tourist info for the whole Iron Range. Station is barely audible at the points where they have signs pointing tourists to AM 1610. (JE-MN3)

MIDNIGHT TO 0800 HOURS ELT

- 540 CBK SK Regina - 6/23 0038 - Fair with CLA music - that time of the night. (TR-IL2)
- 550 KSD MO St. Louis - 6/23 0039 - Poor with talk about postal workers. (TR-IL2)
- 580 WILL IL Urbana - 6/6 0142 - Poor, with talk about politics in Hungary & TC for Central European Time. (TR-IL2) [Probably with APR or NPR feed - Ed.]
- C K A P ON Kapushkasing - 6/23 0041 - Fair with promotion for call for help. Mentioned northern Ontario. (TR-IL2) [Did you answer the call, hi - Ed.]
- C K A P ON Kapushkasing - 6/25 0040 - Fair in CKY's null with AC music and DJ Paul Brenner, slogan *The Sound of Northern Ontario*. (JE-WI)
- 590 CKYC ON Toronto - 6/25 0048 - With WKZO, satellite fed Country and *Real Country 59*. (JE-WI)
- 660 WFAN NY New York - 6/23 0048 - Fair with discussion about New York's loss in the NBA Championships. (TR-IL2)
- 880 WCBS NY New York - 6/23 0050 - Good with ... call *Star 88* on NYNEX ... for news tips. (TR-IL2)
- 900 CHML ON Hamilton - 6/6 0125 - Fair with promotion for talk show and okies. (TR-IL2)
- 970 WAVG KY Louisville - 6/23 0055 - Poor with standards. (TR-IL2)
- 990 CBW MB Winnipeg - 6/6 0135 - Fair, with WLUP off, with CBC *jazzbeat*. (TR-IL2)
- C B W MB Winnipeg - 6/23 0056 - Good with CLA music - that time of the night (TR-IL2)

- 1010 CFRB ON Toronto - 6/6 0140 - Good, with WLUP off, with talk about knowledgeable bartenders. (TR-IL2)
- 1080 KRLL TX Dallas - 6/23 0058 - Poor with ad for Fort Worth, and the *Worthington Hotel*. (TR-IL2)
- 1130 KWKH LA Shreveport - 6/23 0054 - Very poor, on brief fade-in, with talk on "tri-state area". (TR-IL2)
- 1150 KRLG AR North Little Rock - 6/23 0104 - Excellent with gospel music New (TR-IL2)
- 1190 KVSF KS Beloit 6/28 0716 - With weather for South Central Nebraska, call ID into sports. Mixing w/KGBS and others. (BW-OK)
- 1200 KYOO MO Bolivar 6/27 0723-0749 - Fighting w/WOAI, with C&W mx, ads, real "down home" announcer interviewing a local dairy farmer. ID @ 0748 in ads. (BW-OK)
- 1210 WOGL PA Philadelphia - 6/23 0105 - Fair with *Oldies 98* ID, promo for show on WOGL-FM. (TR-IL2)
- 1560 KQYX MO Joplin 6/23 0759 - With American Sports Radio Network, ads, call ID and slogan *Missouri's most powerful AM station* (!?) to CNN Headline News @ 0800. (BW-OK)

0800 TO 1600 HOURS ELT

- 550 KSD MO St. Louis - 6/6 0859 - Poor, with WIND splash, with coverage from Normandy for 50th anniversary of D-Day. (TR-IL2)
- 640 WBOW IN Terre Haute - 6/9 1011 - Fair with talk about service for naming people. (TR-IL1)
- 740 WVLN IL Olney - 6/9 1006 - Poor with CNN news into trading show. New. (TR-IL1)
- 770 WEW MO St. Louis - 6/9 0950 - Fair with standards and St. Louis traffic check. New Logging. (TR-IL1)
- 950 WJPC IL Chicago - 6/9 0955 - Poor with rap music. (TR-IL1)
- 940 WMIX IL Mount Vernon - 6/9 0959 - Tours of B-17 airplane in Carbondale. (TR-IL1)
- 1090 WCRA IL Effingham - 6/9 1015 - Fair with ad for *DR Trimmer*. (TR-IL1)
- 1220 KZEE TX Weatherford 6/23 0810 - With *K-7 Country* slogan, to C&W music. Finally heard this one! (BW-OK)

1600 TO 2400 HOURS ELT

- 1510 WLAC TN Nashville - 6/23 2331 - Fair with *Voice of Prophecy* - contemporary Christian heroes. (TR-IL2)

GRAVEYARD DX UPDATE

* indicates North American record

1230 kHz:

WBHP	AL	Huntsville	J.W. Bay, Jr.	Drexel Hill, PA	723
KIFW	AK	Sitka	Jack Woods	Douglas, AK	*92
KSLO	LA	Opelousas	Steve Ponder	Bossier City, LA	168
KVAS	OR	Astoria	Jack Woods	Waldport, OR	*123
KMUZ	OR	Gresham	Jack Woods	Waldport	*112
KWYZ	WA	Everett	Jack Woods	Corvallis, OR	*238
XEIZ	NL	Monterrey	Jim Boehm	San Antonio, TX	289

1240 kHz:

KPOD	CA	Crescent City	Jack Woods	Waldport, OR	*183
KASO	LA	Minden	Steve Ponder	Bossier City, LA	26

1340 kHz:

KWSL	CO	Grand Junction	Jack Woods	Douglas, AK	*1172
KWVR	OR	Enterprise	Jack Woods	Waldport, OR	*341
KLKI	WA	Anacortes	Jack Woods	Waldport, OR	*291

1400 kHz:

KNND	OR	Cottage Grove	Jack Woods	Waldport	*68
KTF5	TX	Texarkana	Steve Ponder	Bossier City, LA	65

1450 kHz:

KCTI	TX	Gonzales	Steve Ponder	Houston, TX	126
KMHI		Marshall	Steve Ponder	Bossier City, LA	37
KBKW	WA	Aberdeen	Jack Woods	Douglas, AK	*895

1490 kHz:

KXAR	AR	Hope	Stephen Ponder	Bossier City, AR	80
WMOG	GA	Brunswick	Don Trelford	St Ann's Bay, Jamaica	918
KVWC	TX	Vernon	Stephen Ponder	Fort Worth, TX	158
CJSN	SK	Shaunavon	Morris Sorensen	Leaf Rapids, MB	*584

Totals	1230	1240	1340	1400	1450
1490	Total				

Jim Boehm	San Antonio, TX	12	5	8
	11 10	10	56	
Morris Sorensen	Scarborough, ON	2	12	3
	10 6	9	42	
J.W. Bay, Jr.	Drexel Hill, PA	32	-	
	-	-	32	
Jack Woods	Waldport, OR	4	3	7
	6 3	8	31	

**ABBREVIATIONS USED IN DDXD**

/ :parallel to :00: on the hour AC:Adult contemporary AP:Associated Press BBD:big band
BRN:Business Radio Net C&W:country & western CCR:contemporary Christian radio
CHR:contemporary hit radio CID:code ID CL:call letter F7L:easy listening EE:English FF:French
GOS:gospel IRN:Interstate Radio Net LSR:local sunrise LSS:local sunset MLB:Major League
Baseball NPR:National Public Radio OC:open carrier POL:political PSRA:pre-sunrise authority
PSSA:post-sunset authority QRM:man-made interference QRN:natural interference QTH:location
REL:religious ROK:rock 'n' roll RS:regular schedule Sstereo SID:singing ID SRS:sunrise skip
SS:Spanish SSB:Star Spangled Banner SSS:sunset skip TC:time check TT:test tones UC:urban
contemporary UPI:United Press International

DDXD-W**NEWS AND VIEWS**

Good to hear from Al Prete via CompuServe with a *Special* item. Also received notice through the Prodigy business news area that WCAO-MD-600, WBZT-FL-1290, and WAOV-GA-1380 have been or will shortly be sold. Not sure if there will be any programming changes as a result, but it may pay to check on these stations when you can.

I think this column is a record for me - one page! If you can DX this summer, let us know what you hear. Summer deadlines are July 29 and September 2.

SPECIAL

- 740 WGSN NY Huntington - This station, and its sister FM WMJC 94.3, are in the process of being acquired from Greater Media Inc. by Gary Starr and Islandwide Broadcasting L.P. for \$5 million. As of 6/6, WGSN drops NOS format in favor of contemporary hits/news/sports; and WMJC drops AC in favor of ROK // Starr's WRCN-103.9 FM in Riverhead. (AP-NY)
- 1280 WECY DE Seaford - 7/4 0915 - Noted back on the air with satellite all-70's music, "The all new 1280 AM". Haven't heard a call ID yet in an hour of listening. (DB-DE)
- 1480 WADR NY Remsen - 7/4 0005 - Noted dominant with *American Sports Radio Network* talk show, ID as "The home of ESPN Sports on Total Sports Radio - 1350 Rome/Utica and 1480 Remsen", no longer NOS. Make this note on 1350 as well. (DB-DE)

UNID AND UNID HELP

- 1320 UNID 6/20 0400+ - "Golden Horseshoe" network station playing music of the 40's nonstop and without commercials or ID except for "We're here all day long. We are Golden Horseshoe Radio". Have heard for three days now, in WARA null. (AH-RI)

0000 to 0800 ELT

- 570 CJEM NB Edmundston - 6/11 0305 - French station dominating frequency with WSYR, both over usual WMCA. (AH-RI)

- 750 CKGB ON Timmons - 6/10 0250 - Strong with CW. (AH-RI)
- 1040 WYFX FL Boynton Beach - 6/9 0400-0500 - Dominated the frequency, obliterating the usually dominant WHO. Slogan "Foxy 1040" with local merchant ads and "Music good for the soul", an unusual catch here. (AH-RI)

1600 TO 2400 ELT

- 950 WXGI VA Richmond - 5/8 2037 - Good with CW music, WCTN noted off air. (WPT-DC)

OTHER STUFF

- 530 TIS DE Bear - 5/19-5/23 - Noted testing, located at Routes 13 & 7 (Red Lion), signal not as good as in past tests (DS-DE)
- 530 KMJX865 MD Bowie - 6/18 1100 - Noted while on U.S. 50 westbound with parking info for the new Prince Georges County Stadium, home of the Bowie Baysox. Was not noted on eastbound drive Tuesday, 6/21. Maybe only on day of games? (DB-MD)
- 530 WPEP712 MD Elkton - 5/20 - New TIS with Cecil County events, I-95 traffic info. Very strong here. (DS-DE)
- 590 WTB332 MD Rockville - 5/5 2155 - Taped traffic message for Montgomery County, MD (Georgia Avenue). Fair, repeats every 65 seconds. (WPT-DC)
- 870 KFB718 VA Wolf Trap Farm Park - TIS with parking and access info, number to call for schedule of events. (DB-DE via Tim Braun-VA)
- 1610 WNXP DE Wilmington - This TIS has not been active for some time, but OC is still on - Philly Airport TIS is strong in its null. (DS-DE)
- 1610 WNQA286 MD Annapolis - 6/21 1545 - Noted on new frequency, ex-530, with traffic info for Annapolis area. Also included list of other "Maryland State Highway Administration Travelers Advisory Radio Stations" as "on the Eastern Shore in Easton, Queenstown, Cambridge, Salisbury and Ocean City, and on the north and west sides of the Baltimore and Washington beltways". As far as I have heard all of these are on 530 except this one and one of those in the Baltimore area. (DB-MD)

REPORTERS

- AH-RI Al Hemmalin, Middletown, RI: FRG-100, Palomar loop, longwire, Grove antenna tuner
- AP-NY Al Prete, West Islip, LI, NY:
- DS-DE Dave Schmidt, Wilmington, DE: HQ180A, SM2, Superadio II
- WPT-DC Bill Townshend, Washington, DC: Sony ICF-2010
- DB-DE Dave Braun, on U.S. 50/U.S. 301 in MD: Subaru car radio, R-5000, Quantum loop

PROBLEMS, PROBLEMS?

We can't solve all your woes, but we can solve your *DX News* problems. Torn, soiled, partially-printed, MIA, or worst of all, delivered in a USPS plastic baggie? No need to return the copy - just send a postcard to NRC - 2840 SE Illinois Ave. - Topeka, KS 66605, and a replacement copy will be mailed free. Missing back issue? Replacement copies from Vol. 56 on, to current NRC members only, are sent for the cost of first-class postage (29¢ for a 24-pager, 52¢ for a 48-pager). Quantities of 24 may be sent book rate for \$1.48.

See? No problem!

Facts About NRC's DX Audio Service

The DX Audio Service provides the ONLY monthly broadcast news cassette service to the DX community. Available to anyone, anywhere, it is designed to inform the radio listener in a pleasing and informative manner. Many of the announcements on the service are professional broadcasters giving their free time to give the listener the finest service available.

DXAS was started to provide broadcast information, both AM and FM, to the visually-handicapped DX listener. It has evolved into a service which provides useful material to all types of listeners. Many subscribers listen to the tape to and from their place of work while driving. Features include not only news about DX, but also airchecks from radio markets, dialscans, frequency scans, and other items.

A one-year subscription is only \$25. Sample 45-minute copy: \$2.00; back issues of DXAS: \$3. Cassettes are mailed by First Class mail, on or about the 20th of the month. For information, subscriptions, renewals, back and sample copies: write to DX Audio Service - P. O. Box 164 - Mannville, NY 13661-0164

International DX Digest

Jim Renfrew JimRenfrew@AOL.com
61 Wilcox Street
Rochester, NY 14607-3832

Foreign DX Catches. Times are UTC; for ELT, subtract 5 hrs.

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In answer to my own question of last month, after consulting with Paul, we will continue to consider loggings of Alaska, Hawaii and US territories as DX "countries" and as IDXD material. First of all, this is what we have been doing for a long time. Second, it's what every other DX club that I know of does. Third, it's a hobby, not a Supreme Court debate, and in my experience is a question that few NRC members care about one way or another, in my case because my chances of logging Hawaii and Alaska are virtually nil! Fourth, you are always free to count whatever countries you want in compiling your own records.

Last month, I lost Bruce Condi's narrative report of his logging of the HCJB test, but it appeared in last issue's Musings section, so you didn't miss a thing.

A hot Trans-Pacific report from John Bryant, Guy Atkins, and Nick Hall-Patch is our lead item this edition!

## TRANS-PACIFIC DX

- 531 2MC, W. Kempsey, NSW, Australia noted throughout the evening at low levels. Came up nicely at dawn enhancement (1150 to 1230). ID, TC with pips and into the news at 1200 on 6/13. Also logged on 6/14 [Bryant\*BC]
- 540 2AP, Apia, W. Samoa (tentative) seemed to dominate co-chan. CBK on several occasions. Polynesian choir around 0800 on 6/13 and traditional Polynesian singing around 0950 on 6/13. [Bryant\*BC]
- 576 2RN, Sydney, Australia // to stronger 4RN, 792, Brisbane with talk show at 1140, 6/14. Levels briefly good. [Bryant\*BC]
- 702 2BL Sydney, AUSTRALIA (pres.) Noted throughout the evening from 0820 until band fade at 1330 on 6/3 with usual FF programming. Also noted on 6/5. Good levels at times. [Bryant\*WA] Here all evening with fair levels increasing to an excellent signal around 1200 UTC. NSW News, Weather for Sydney and surrounding area, etc. 6/13. Also logged 6/14. [Bryant\*BC]
- 738 Papeete, TAHITI FF talk by two men noted in passing at 1232 UTC on 6/5. [Bryant\*WA] First noted at 0700 on 6/13 with 2 men in FF. Signal present periodically for the next 6 hours or so. Strength never better than fair. [Bryant\*BC]
- 774 3LO Melbourne, AUSTRALIA. ABC news until 1210 UTC, 6/5, then ballads. [Bryant\*WA] Phone-in talk show at good level at dawn enhancement, 1141 on 14 June. [Bryant\*BC]
- 774 JOBB, Akita, JAPAN At S-9 levels in JJ during brief East Asian opening at 1110 UTC on 6/3. NHK2 programming in parallel to JOBB, Osaka on 828 kHz. Also noted on 6/5. [Bryant\*WA]
- 792 4RN, Brisbane, AUSTRALIA listed. FE Aussie DJ playing ballads. Good levels around 1220 to 1240 UTC, 6/5, with nary an ID. [Bryant\*WA]
- 828 JOBB, NIK2, Osaka, JAPAN, noted in JJ from 1110 tune-in throughout the 45 minute East Asian opening on 6/3. Levels were never strong. Parallel to 774, Akita. Also noted weakly on 6/5. [Bryant\*WA]
- 837 4RK, Rockhampton, Qsld., Australia. Excellent level at dawn enhancement, 1148-1205 with talk show and news 6/14 [Bryant\*BC]
- 846 3BK1, Naranaki, KIRIBATI. Noted at 0830 on 6/3 with programming in parallel with 9825 kHz. SWBC outlet. Level poor to fair. [Bryant\*WA] // to SWBC outlet on 9825 kHz. Noted at 0705 on 6/13 with fair strength. Presumed news in Island language by female announcer. Also logged briefly in // on 6/14. [Bryant\*BC]
- 1017 A37, Nuku'alofa, TONGA, noted from 0830 tune-in until sign-off at 1000 on 6/3. Signal relatively weak but well modulated throughout. [Bryant\*WA] (presumed) at 0711 UTC, 6/13 with female speaking in Island language. Also heard 6/14. This signal is just not as strong as it was in 89, 90 and 91 seasons. Equipment deterioration??? [Bryant\*BC]
- 1053 S. Korean jammer still here. Noted at S-9 at 1122 UTC on 6/3. North Korean programming unheard underneath. [Bryant\*WA]
- 1116 4MB, Maryborough, Qsld., Australia. Probable. Aussie EE heard briefly at max dawn 1220, 6/14 [Bryant\*BC]
- 1143 2HD, Newcastle, NSW, AUSTRALIA. This one probable at good levels, 1247 - 1301 UTC on 6/3. Slogan "Playing the best music in the Highlands and the coal fields." Soft rock programming with lotsa commercials. [Bryant\*WA]

- 1332 4BU, Bundaberg, Qsld, Australia most likely. Briefly with Aussie audio at max dawn, 1225, 6/14 [Bryant\*BC]
- 1475 Strong het heard here during the East Asian opening about 1130 UTC on 6/3. Presume that RTVMalasia, Kotaknabatu is still recalcitrant about being off frequency with the rest of the planet. [Bryant\*WA] Borneo present at very low level with lagu pops at 1120 on 6/13. Audio also noted 1111 to 1125 UTC on 6/14. [Bryant\*BC]
- 1548 4QD Emerald, AUSTRALIA. Ballads, Aussie FE DJ, proper TC at 1000 UTC on 6/5. Slogan "ABC Radio, the sound of Queensland!" [Bryant\*WA] 1230 on 6/14 with excellent signal. Ballads & talk. [Bryant\*BC]
- 1557 UNID Logged between 0830 tune-in and 1330 post-dawn band fade out at Grayland. EE rock/ballads from the 70s. Fem ann. in unknown non-polynesian language running program early in reception. Continuous mx later in evening. No commercials. ??? [Bryant\*WA] UNID first noted on 6/3 DXpedition. Found at good level on 6/13 at 0710 UTC. Host was a man & language could be Tagalog, but the time seems too early. By 0715, level dropped to poor and continued at that level till band fade @ 1300 [Bryant\*BC] First heard as a het on 6/14 at 0640 and with audio at 0657. These times virtually rule out a Philippine station. Prior to about 0900, the local DJ is very active. After about 0900, records are played with various amounts of dead air. [Bryant\*BC]
- 1566 HLAZ, Cheju Island, S KOREA. (pres.) Here in Chinese with rel. prgm. at S-9+ level. Noted from 1115 til 1150 on 6/3. Het was still evident at 30 minutes past local dawn at Grayland. [Bryant\*WA]

John speaks: "June 3rd - Lots of relatively low level Trans-Pac signals throughout the night. More signals than expected in the upper portions of the dial. Many remained unlogged due to logging hours of uninterrupted 70s rock trying to ID the 1557 signal! Morning of June 5th we were using only one Beverage at about 250 deg. Levels seemed poorer, but there were, again many unlogged signals, especially above 1200 kHz. 1557 again present at good levels. Brief EaAsian opening before back to Downunder."

## PAN-AMERICAN DX

- 610 COLOMBIA RCN Bogota, MAY 17 0120 - American EZL music (ballads), early 60's rock. ID by man in EE as "RCN, the pioneer station in Bogota". Full ID by woman in EE and SS as "RCN 610 International at 0130, then into a Rod Stewart song, SIO 333. This is an EE format rock station located in Bogota. Probably what Bueneman heard on 610 in the May 23rd issue of DXN. [Seiden- ARUBA]
- 660 VENEZUELA YVNA Onda de Los Medanos, MAY 17 0300 - Ads for shoe store, photo store, jewelry store, love songs in SS, male DJ, SIO 444. [Seiden- ARUBA]
- 700 VENEZUELA YVMH R. Popular, MAY 17 0305 - L2L, latin vocals, ID by man at 0308. [Seiden-ARUBA]
- 740 VENEZUELA YVNC R. Maracaibo, MAY 17 0310 - Lively latin vocals, ID by man at 0311. [Seiden-ARUBA]
- 820 VENEZUELA R. Guadalupeana, Coro, June 11 0206 - Ads, ID and LA ballad. SIO 333 [Burnell-NF]
- 830 VENEZUELA R. Sensación, Caracas, June 11, 0220 - Lots of ads, prices in Bolivares, for stores/companies in Caracas. QRM from St. Kitts, SIO 333. [Burnell-NF]
- 840 BRAZIL likely R. Bandeirantes, São Paulo, June 11 0142 - PP talk, mentioned "Radio Mundial" a few times, but I think this was hype for coverage of the upcoming World Cup. (Over SS stn that had time pips at 0145) SIO 333 [Burnell-NF]
- 860 BRAZIL R. "CBN", Rio de Janeiro, June 11 0148 - Woman with PP news then man with TC, "C-B-N" ID and wx. SIO 343 [Burnell-NF]
- 880 BRAZIL R. Inconfidencia, Belo Horizonte, June 11 0211 - PP talk regarding soccer faded up over WCBs. SIO 322 [Burnell-NF]
- 895 ST. KITTS & NEVIS VO Nevis, Charlestown, June 11 0040 - PSA for Caribbean Conservation Assn. then soca mx. SIO 233 [Burnell-NF]
- 980 BRAZIL R. Nacional, Brasília, June 11 0117 - Man talk PP, then one of Linda Ronstadt's SS songs. SIO 333 [Burnell-NF]
- 1030 PUERTO RICO WOSO, San Juan, June 11 0011 - FF program: Wall Street report, ID, pop music then faded below UNID SS stn. SIO 333 [Burnell-NF]
- 1040 BRAZIL R. Capital, São Paulo, June 11 0018 - PP phone conversation, ancr said "Música Capital" then played Braz pops. SIO 444 [Burnell-NF]
- 1100 COLOMBIA HJAT Caracol, MAY 17 0134 - Colombian vocal music with station pings and ID by man. SIO 333. [Seiden-ARUBA]
- 1110 VENEZUELA R. Carupano, Carupano, June 11 0159 - ID including mention of Sistema Radial Venezolana, IC, Venez music. SIO 333 [Burnell-NF]

- 1205 CAYMAN ISLANDS Georgetown, MAY 26 2100-2117 - Older rock, ID as R. Cayman, woman DJ, still on the air. [Trelford-JAM] (Don, do you still hear them on 1555 as well? - Jim)
- 1220 BRAZIL R. Globo, Rio de Janeiro, June 10 2359 - Slogans and ad, "Radio Globo Noticias" at 0000. Stop from VOAR (1210), SIO 333 [Burnell-NF]
- 1280 BRAZIL R. Tupi, Rio de Janeiro, June 10 2353 - Jingles and "Super Radio Tupi" ID, hype for the World Cup and audio replays of famous goals. Over CBN (640) harmonic, SIO 344. [Burnell-NF]
- 1320 ARUBA VO of Aruba, Oranjestad, MAY 17 0136 - With talk show by man in Papiamentu. At 0253 recheck programming had shifted to EE and mellow rock. [Seiden-ARUBA]
- 1350 COLOMBIA HJOC Santa Marta, MAY 31 0212-0312 - Sports or talk show on Sports Colombia and mention of Mexico, interference from WDCF but dominated frequency by 2200 [Trelford-JAM]
- 1370 CUBA CMFA Nuevitas, JUN 2 0004-0030 - LA pop music, ID as "R. Cadena Agromonte, Camaguey, Cuba", far. [Trelford-JAM]
- 1440 ARUBA R. Kelkboom, Oranjestad, MAY 17 0140 - Male and female vocals in Papiamentu. [Seiden-ARUBA]
- 1470 VENEZUELA R. Vibración, Carupano, June 11 0003 - Ad for pharmacy chain and Hotel Mar Caribe, promo for pgm "En Campana", ID then LA mx. SIO 344 [Burnell-NF]

Mark Seiden speaks: "Was in Aruba a couple of weeks ago on business; took my new Grundig YB-400 and hooked the 21' wire that comes with the radio to the balcony on the 6th floor of the Hyatt, which is located on the south side of the island on the coast (Venezuela 18 miles to the south). I expected great BCB, latin and perhaps some African DX, but no soap. The strong Venezuelan and Colombian stations were overwhelming." (In the Dominican Republic last year the Venezuelans and Colombians were very dominant - Jim)

Jean speaks: "Conditions were disappointing...no small Brazilians audible, just the big guns and the usual Venezuelans. Angolan signals, which are characteristic of decent southern propagation, were completely absent. The only loud TA's heard were a few common Spaniards/Canary Is. stns on the lower part of the band."

#### STATION NEWS

UNITED KINGDOM: BBC Radio 1 has cut back its MW operating hours prior to quitting MW completely in July. R1 used to close down its MW transmitters at midnight local time (assuming the timer set to do this operated correctly). From this weekend gone (JUNE 12) a tape loop is heard between 6pm and midnight advising listeners to retune to FM. If you want to hear R1 on 1053 or 1089kHz you have probably less than a month in which to do so.

Not 100% true since some of the transmitters in the 2 synchronous networks are carrying the regular programming while the rest carry the looped announcement. Skywaves of the former can be clearly heard between pauses in modulation of the latter. Anyone know which ones? My guess is the transmitters covering areas not served (fully) by the FM outlets. Wonder if they too close in July.

I too noticed R1 audio mixed with the looped announcements but assumed/inferred that the audio was being mixed prior to transmission and NOT a mix from different transmitters. I have also noticed after midnight that a weak R1 signal, clear of any loop announcements, is audible on both 1053 and 1089kHz. These signals are poor quality in East Anglia and I have suspected that transmitters in N Ireland/Cumbria are the ones left on overnight.

I have repeatedly tried to get an answer from the "retuning" phone number announced on air (0345-010313) which is the number for BBC Engineering Information but it takes ages to get an answer.

However, according to BBC Engineering all MW transmitters should be carrying the loop announcement between 6pm and midnight, and all transmitters will close down at the end of July (even if FM coverage is less than perfect in certain areas). Any transmitters currently still on air after midnight local time is due to switching faults and not deliberate. The last programme from R1 on MW will be the breakfast show between 0600-0900 hrs (local) on July 1st. For the rest of July only a tape loop will be aired.

BBC Radio 1 has to vacate all its MW channels before July 31st on which date they are handed back to the Radio Authority. This affects the high power channels of 1053 & 1089kHz as well as low power relays on 1107 and 1485kHz.

The BBC will be leasing its transmitters to the new commercial national talk-radio network that has been awarded the franchise. Start date for the new service is likely to be late 1994. [Steve Whitt, MW News via e-mail]

NORWAY: Radio Norway Home and SW service has been on strike since last Sunday morning. Three NRK trade unions are on strike. On FM P2 and P3 frequencies are silent. P1 programming consists of news and interval signals combined with a short announcement on what kind of

programming is still available. The only broadcasts being made within Norway are short 3 minute summaries of the news. NRK TV is silent as well. Unless the strike doesn't end by the start of the World Soccer Championship (NRK has the Norwegian rights to broadcast the matches), the strike could last several weeks. [Jan Alvestad and friends via Steve Whitt, MW News via e-mail]

#### SPECIAL FEATURE: SLOGANS

540 NCG R. Corporación "la radio que llega" 550 VEN Mundial "en primer lugar" 610 CIM RCN Radio Internacional "A world of music" 650 PNR R. Mia "cadena nacional" 660 CLM Colmundo Radio "6-60 en su dial" 670 EQR R. Jesus del Gran Poder "la voz que llega al corazón del pueblo" 720 VEN R. Oriente "la señal de Venezuela" 760 PNR La Voz del Istmo "la onda de inspiración" 790 CLM La Voz de Colombia "la primera" 790 VEN R. Minuto "las noches son mas alegres con" 840 CLM HJ Doble K "la emisora de los grandes éxitos" 900 VEN R. Mara Ritmo "la súper radio" 940 VEN Súper Radio Punto Fijo "940 AM" 1140 CLM R. Piendamó "sistema comunal" 1190 CLM R. Mira "somos su estación" 1270 CLM R. Melodia "en el primer lugar" 1290 CLM Ondas del Puerto "la poderosa de Girardot" 1380 CLM Armonías del Palmar "la voz que se oye en toda la ciudad" 1390 CLM La Voz de Los Andes "a su servicio" 1390 CLM R. Avenida "de todolar, porque ud lo merece" 1470 VEN R. Latina "con gusto y sentido" 1530 CLM R. Total "con la música de todos los tiempos" 1550 CLM HJ/21 "excelencia radial" 1590 VEN R. Deporte "15-90 AM, realmente deportiva" (excerpts from a list prepared by Yinber H. Gavina in PLAY-DX #787)

#### QSL INFORMATION

CUBA: CMKZ 1520, Radio Baragua, Santiago, v/s Monika Porto, Dpto. Relaciones Públicas. [Trelford-JAM]

MEXICO: XEBA "La Consentida", Guadalajara; v/s Miss Tereza Morales Romo, Manager of XEBA and XEZZ (Apartado Postal 6-460, Guadalajara 44680). [Trelford JAM]

#### CONTRIBUTORS

Mark Seiden, DXing from ARUBA.

Don Trelford, St. Ann's Bay, JAMAICA

John Bryant and Guy Atkins, Grayland State Park, WA; beverages at 240, 270, 300 degrees, NRD-525, Drake R7A

John Bryant and Nick Hall-Patch, Sombrio Breach, BC; JRC NRD-525-modified, array of 4 1000-foot Beverages from 220 to 340 deg.

Jean Burnell, St. John's NF (10 minutes south by car); Icom IC-R71A and a 1200-foot untermated wire aimed at eastern Brazil (SSE)

#### IRCA Mexican Log, 3rd Edition, Now Available!

After months of preparation, IRCA has published the 1994 edition of the IRCA Mexican Log.

The log lists all AM stations in Mexico by frequency, giving call letters, state, city, day power, night power, slogans, schedule in UTC/GMT, formats, networks, and notes. Stations that have changed frequency since 1990 are cross-referenced on the old frequency.

The call letter index gives call, frequency, city and state. The city index (listed by state, then city) gives frequency, call, day and night power. There is even a guide to the Spanish alphabet and numbers.

The log has been completely updated from the 1990 edition and carefully cross-checked by IRCA members in Mexico and the U.S. This will be an indispensable reference for anyone who hears Mexican radio stations.

The price, payable to IRCA in U.S. funds: IRCA/NRC Member: \$6 U.S./Canada/Mexico/seamail, \$7 rest of the Americas airmail, \$7.50 Europe/Asia airmail, \$8 Australia/New Zealand airmail. Non-Member: \$8 U.S./Canada/Mexico/seamail, \$9 rest of the Americas airmail, \$9.50 Europe/Asia airmail, \$10 Australia/New Zealand airmail.

Order from Phil Bythway - IRCA Bookstore - 9705 Mary N.W. - Seattle, WA 98117.

#### IRCA AM-FM Almanac - 1991 Edition Reprint

IRCA has reprinted a limited number of copies of the 5th Edition of the IRCA AM-FM Almanac. Several DX'ers have expressed interest in obtaining the most recent Almanac edition from 1991, rather than waiting for the next complete Almanac in 1994.

◆ 1991 Edition — this is the edition sent to the press in October, 1990. Information is from 1988 thru 1990. Much of the information is still useful today.

◆ Be sure to state your preference for Looseleaf or Comb Binding. This edition is available looseleaf, ready to hole-punch and place in a binder, allowing for easy updates. Comb binding is available at no extra charge if you request it. The price for this reprint is the same as in 1991:

IRCA/NRC member: U.S. - \$13.00 Canada - \$14.00 Overseas Sea Mail - \$14.00 Overseas Air-Mail - \$17.00  
Non-member: U.S. - \$15.00 Canada - \$16.00 Overseas Sea Mail - \$16.00 Overseas Air-Mail - \$19.00

Send check or money order, payable to "IRCA" in U.S. funds, to Phil Bythway, IRCA Bookstore, 9705 Mary N.W., Seattle, WA 98117. Thank you!



# FM DX

## Digest

DX on the FM band, from April through September

First off, sorry for how last month's column turned out. In the process of converting my MS-DOS disk over to Paul's system, apparently returns get erased. Anyway, at least it saved a little space. ('Twasn't your fault. I used a different translation application this time, which retained returns at the end of every line. -pls.)

Conditions really picked up, especially the last couple of weeks of the month. The only complaint I'd have about the season so far is the lack of western openings. With the amount of southeastern E-skip, it almost seems like I live in Florida!

John Zondlo of Yukon, OK wrote to say that Joe Fela's 100.9 Es catch is indeed KGLC - they simulcast the AM KVIS, who ID's as "The King's Vision" Thanks for your info, John.

### Tom Sanders, Davison, MI

Equipment: Pioneer TX9500-II w/RS 5 element antenna at 25 feet; JVC car radio

June 12 Es

2000 88.1 WSBF SC Clemson, w/ end of Bob Dylan's "Highway 61 Revisited," CL's and slogan "Upstate's only alternative."

2000 88.1 WCQS NC Asheville, legal ID mentioning // stn WQOS Franklin and the Mountaineer Radio Net; trad. country show (Country Roots)

June 14 Es

2130-40 88.1 KGNZ TX Abilene, Christian heavy metal music. Solid, pegging the needle in stereo for about 10 minutes.

June 19 Tr

1730-45 93.9 WDOR WI Sturgeon Bay, Brewers bb. Heard in car, but only CKLW at home

June 21 Es

2215-45 97.5 WPCV FL Winter Haven, in and out w/C&W. Heard many times before 6/21.

2200 88.1 WJIS FL Bradenton, solid in stereo most of the time with "Stillwaters" soft Christian hits show

2200-2315 89.5 WMNF FL Tampa, most steady for longest time this night with "Underground Circus" alt music show and mentions of phone calls from Midland and Saginaw, MI. Legal ID at 2300 "serving central Florida and some parts of Michigan."

### Mike Hawk, NØOSY

10212 P St.

Omaha, NE 68127-2130

### Eric Bueneman, Hazelwood, MO

Equipment: Realistic STA-90, no mods; Archer VU-110 antenna w/rotor and inline amplifier at 33 feet

May 18 Tr

0240 103.5 WUEZ IL Christopher, good w/EZL lcl KLOU-103.3 off

0257 97.9 WXEF IL Effingham, good w/AC/CHR, ex WBFG-97.7

May 18 Fs

1221 93.3 WAIA GA St Marys, good with "A-1-A" ID, AC/CHR for Jacksonville over WFLZ with some splash from WTMI-93.1 Miami

May 20 Tr

0103 93.3 WMXP IL Peoria, good over WJLI w/legal ID, "Mix 93.3", AC/OLD

0145 90.1 WEFT IL Champaign, good w/ alt. rock, no ID's - is a first grader running this?

0205 98.5 WACF IL Paris, fair under semi local KTJJ w/ lcl ad, calls, C&W music // WPRS-1440 AM

0225 95.3 KLZE MO Owensville, good to fair over WRXX with Radio Aahs, CSN Children's programs // WWTC, WAOZ, etc. lcl WFUN off

0300 94.1 WGFA IL Watseka, good to fair with WMIX, ABC news, AC/CHR May 23 Es

1942 88.3 KLYT NM Albuquerque, good to poor with KDHX splash and religious talk show

1945 93.1 KQIZ TX Amarillo, "All Hit Z-93" and CL ID's into CHR

1947 94.1 KZRR NM Albuquerque, good over KBUY with AOR // KZSS-610

1954 94.1 KBUY TX Amarillo, fair to poor w/KZRR and C&W

1957 98.7 KKLt AZ Phoenix, good w/soft AC, "K-lite 98.7" and traffic report

2000 97.5 KVNA AZ Flagstaff, good over WBBA w/legal ID and CHR

2010 96.5 KRPM AZ Show Low, mention of sponsors, splash from KIHT

2015 92.1 KZUA AZ Holbrook, good w/C&W, lcl ads, wx forecast, Z-92 ID, splash from WIL

2019 93.3 KKOBNM Albuquerque, good over KDKB w/AC/CHR, "93.3 KOB-FM" June 1 Tr

0150 106.1 WINN IN N Vernon, good and alone on channel w/lcl ads, "Win 106",

legal ID mentioning Seymour and Columbus, into CHR

0157 96.7 WCVS IL Virden, good w/Oldies 96.7 ID and legal ID w/Springfield (ex 1450 Springfield)

0202 106.9 WDML IL Woodlawn, good with "Oldies 106.9 WDML" ID

Eric reports: "These are new stations heard at this QTH this season. Veries already back from KBAT-93.3 and KPVI-87.75 and several TV stations, so this season has gotten off to a hot start. Catching some locals off has enabled me to bag stations on 92.5 and 103.5 via trop, and even skip rolls in on the adjacent channels (the advantage to being 20 miles away, I guess) with the locals blasting away at 100 kw ERP. The nearest FM is 6 miles up the road (WKBB) and giving me no problems. KCFV 89.5 is even closer (five miles), but has only a 100 watt signal. Speaking of KCFV, my on-air hours, under the pseudonym E.B. Stevenson (until 8/21) are Sat. 1200-1600 and Sun 0800-1200 CDT. 73, Eric NOUTH

Gary Houdek of Munden, KS reports a few station changes. KGRU in Henderson, TX has changed from 100.1 to 99.9 and increased power to 7100 watts. KQNS in Lindsborg, KS has moved from 95.8 to 95.5, changing power to 25,000 watts. KDNS in Downs, KS is on with C&W.

### Rick Dau, Iowa City, IA

June 9 Tr

2135 106.5 WLJY WI Marshfield, Joy 106 ID heard between songs. first time

here in about 2 years, KRVR is the regular

June 10 Es

1742 96.1 unID CO, slogan "Good times and great Colorado Country". '92 FM Atlas shows 2 CO stns, KGLL maybe? [The new Atlas shows 3 stations, but KGLL seems most likely. They are the only C&W listed, and are 100 kw]

June 13 Tr

0136 101.9 KYNN NE Lincoln, while KNWS faded, heard DJ chatter. "25 songs in a row on the Hit Kicker, 101.9..." Thanks to Todd Brandeburg for ID'ing this.

June 21 Es

1820 107.3 WCOF FL Tampa, Coast 107.3 ID and spot for Carlisle Ford in Tampa

1830 104.1 WGLF FL Tallahassee, Gulf 104 ID

1835 94.5 WCVU FL Naples, Shore 94.5; heard again 6/28

1839 95.5 WOVV FL Ft Pierce, with Star 95.5 ID and ad for Splash Beach Club in W Palm Beach

1846 97.3 WFLC FL Miami, ad that mentioned South Florida

1850 96.9 WINK FL Ft Myers, with DJ:

"Special love songs for special people on Wink 96.9". Heard about 2 years ago.

1902 101.5 WLYF FL Miami, CLs mentioned during DJ chatter

1905 101.7 unID FL, current temps for Ocala and Gainesville, ID sounded like WDJY. [This is Trenton, FL, who recently changed to WDJY-mrh]

1914 104.1 unID, call-in program that was first heard around 1830. Thought the host said "Real Radio 104.1". [WTKS in Cocoa Beach (Orlando) has an all talk format-mrh]

1922 104.3 WEAT FL W Palm Beach, Elton John song, than "Sunny 104.3" ID and talk from DJ Sonny Quinn

1923 103.9 unID, Sunny 103 ID, then song "You're no Good" by Linda Ronstadt.

Definitely not WZMQ, though I'm open to suggestions.

June 27 Es

1156 96.9 WKTC NC Goldsboro, w/tornado warning for eastern Martin county, moving out of Beaufort county. Rand McNally helped for this one.

1346 93.1 WEDG FL Edgewater, with ID as "Daytona's All Gold 93"

1352 92.5 WYUU FL Safety Harbor, Tampa area wx and "U-92" jingle

1406 94.9 WZTA FL Miami Beach, Bruce Springsteen's "Blinded by the Light", then "Zeta 94.9" ID

June 28 Es

1220 107.5 WSFM NC Southport, Led Zeppelin song, Surf 107 ID and mention that the Surf Patrol would be on the streets today.

1244 95.1 WRNS NC Kinston, ad for Betsy Drake Interiors and mention of WRNS

1307 99.1 WEDR FL Miami, with R&B and "WEDR 99 Jams"

1312 92.5 WEOV FL Key West, ad for Duncan Ford and ID as "The Key's #1 Music Station"

1315 92.9 WEMQ FL Ocala, Q-Lite 92.9 ID and Ocala Lincoln-Mercury ad

1320 93.1 WTMI FL Miami, CLa mx and "You're listening to WTMI, Stereo 93, South Florida's Voice for the Arts"

1322 93.3 WFLZ FL Tampa, "Tampa Bay's only hit music station, the Power Pig"

1324 93.3 KKOBNM Albuquerque, with wx and "KOB-FM" jingle

1332 93.5 WKRY FL Key West, Key 93 weather

1347 93.5 WMTO FL Port St. Joe, ID between jazz cuts "93.5 WMTO Port St Joe". Heard Sting and Steely Dan earlier.

1351 95.7 WMTX FL Clearwater, ad for Clearwater Mattress "where Tampa Bay goes to sleep". I've logged this station's



- AM sister on 1040 from Iowa City!  
 1358 95.9 WRBA FL Springfield, contest  
 promo for a backyard BBQ from Bay 96  
 1359 95.7 KPCL NM Farmington, ID as  
 "You're 24 hour companion, KPCL" then  
 USA nx  
 1404 94.9 KWKY NM Aztec, ad for drugstore  
 with 2 Farmington locations then ID as  
 "Kwick Radio digital 94.9"  
 1424 98.5 WFSY FL Panama City, promo for  
 Sunny 98.5's July 4th party  
 1438 98.7 KRTZ CO Cortez, lcl ads  
 1439 99.1 WKNN MS Pascagoula, ad for  
 Mitchell Motors in Pascagoula. First catch  
 from the Magnolia State.  
 1441 99.1 KXKC LA New Iberia, ad for  
 Simono's Grocery and ID jingle  
 1456 99.9 KXTC NM Thoreau, ad for Taco Bell  
 off Highway 66 and highway triple 6.  
 1457 99.9 KTSM TX El Paso, with KTSM ID  
 and mentions of El Paso  
 1639 93.1 KRCS SD Sturgis, weather: "...80  
 degrees here in downtown Sturgis ..."

#### Hank Holbrook, Dunkirk, MD

Equipment: Fisher 101-R (old tube set given to  
 me by neighbor - has been tuned up by AL  
 and should be a good tuner - sensitive and  
 selective) vintage 1959. Antenna:  
 Winegard CS-6065 single bay 10 element  
 yagi and channel master rotor

April 30 Tr

1557 92.1 WLBW DE Fenwick Is., often good  
 here - interference problems with WVLT  
 NJ. R&R oldies, relays WLVW 105.5 - both  
 serve Ocean City - why same  
 programming?

May 23 Tr

0856 97.1 WLFM MD Ocean City, rough to  
 pull in, DC really dominates. Takes super  
 opening for this one "Classic Rock 97.1 the  
 Fox"

June 12 Es

2009 91.7 WBGL IL Champaign, came atop  
 channel caught an annet which ended  
 "right here WBGL" then into what seemed  
 to be C&W music

?? 91.7 KRSW MN Worthington, severe wx  
 warnings for many IA and MN locations,  
 in for about a minute, then 2 CLA stns.  
 KRSW may have been one.

June 17 Tr

0757 106.9 WRXS MD Ocean City, new station  
 - X107 modern rock.

June 21 Tr

0632 93.1 WHYN MA Springfield, good much  
 of the time with WPOC nullled. Oldies 93  
 HYN ID

June 21 Es

1859 89.1 WBSN LA New Orleans, ID, wx,  
 religious type rock mx. Very good at times.

2020 88.3 WRBH LA New Orleans, reading  
 for the blind: sports etc in detail! Very  
 interesting.

Hank notes he had many unIDs, and heard  
 previously QSL'd stns KVTI-91.7, KERA  
 90.1 and KRVS 88.7

June 27 Es

1114 92.5 KSYN MO Joplin, ads, contest,  
 music, QRM - KOMA dominated 1115  
 92.5 KOMA OK Oklahoma City, OLD, ads

1223 92.9 KZOC KS Osage City, KZ-93; C&W,  
 good, ads and PSAs

1258 88.7 KLNE NE Lexington. BBC nx, IDs,  
 sponsors, pretty good

#### Morris Sorensen, Scarborough, ON

Equipment: GE Superadio II or Panasonic RF-  
 B65 w/ whip antenna

May 23 Es

2000 90.1 WMPR MS Jackson, program  
 annets and ID

May 25 Tr

0834 88.7 CIMX ON Windsor, o/ semi-local  
 WBFO in CIRV splatter; modern rock and  
 89-X slogan

0856 89.9 CBE ON Windsor, CBC stereo CLA  
 music

0929 88.3 WCDU NY Warsaw, with Christain  
 music and talk, easily seperated from  
 CIRV 88.1

1958 89.7 WKSU OH Kent, program annets  
 and ID

June 12 Es

1912 89.7 WMCU FL Miami, GOS mx, ID  
 mentioning Miami-Ft Lauderdale and "S.  
 Florida's Christain Radio"

1924 95.7 WGAP TN Marysville, obliterating  
 semi-local CFJB w/ C&W for the Knoxville  
 area

1929 90.7 WVAS AL Montgomery, "Your Jazz  
 Giant 90.7" and wx

June 13 GW

1928 91.9 CFLZ ON Niagara Falls, rarely  
 heard poking through with tourist info and  
 IDs (ID'ing as CFL-ze for Americans and  
 CFL-zed for Canadians) and mentioning  
 "broadcasting from atop the Skylon tower."  
 Listed as 8 watts.

Mike's DX, using the Kenwood KT-815 (IF  
 mod) and FM-10 up 33'

June 3 Tr

0756 98.1 KBFM MN Blue Earth, 98 Country  
 0813 95.3 KDJS MN Willmar, K-95.3

June 7 Tr

0100 97.7 KFBD MO Waynesville

0100 97.7 KZBK MO Brookfield, "The Z";  
 apparently hasn't moved to 96.9 yet

1400 90.3 KBLZ KS Topeka

June 7 Es

1354 88.3 KBNR TX Brownsville. SS ID

June 9 Es

1200 91.3 WSEB FL Englewood

1210 89.5 WSRX FL Naples

1223 99.3 WJBX FL Ft Myers, classic rock;  
 heard part of ID

1336 92.1 WCTQ FL Venice, lcl ad

1907 88.1 WAYF FL W. Palm Beach, Way FM

June 11 Tr

1602 92.1 KMFC MO Centralia, rel

June 12 Es

1610 96.7 WSCZ SC Greenwood

June 14 Tr

0935 103.1 KDMG IA Burlington

June 14 Es

0937 96.3 WRHT NC Morehead City, The Hot  
 FM

1931 91.7 WFTI FL St Pete

1938 98.1 WWSF-1 FL Fort Walton Beach

1942 102.1 WWAV Santa Rosa Beach, ex 102.3

2000 89.1 ????? VERY STRANGE! Had three  
 stations audible - sounded like mixing  
 products or overload, (i.e. no capture effect  
 - all three could be heard at the same time).

The three stations were WJIS-88.1  
 Bradenton, WEEJ 100.1, and WLPJ 91.5

These stations aren't related in any way  
 and I can't see any way these stations  
 could mix to combine on 89.1. Can anyone  
 help??

2027 106.3 WKNU AL Brewton

2032 99.3 WEBZ FL Mexico Beach, The Breeze

2037 102.9 WNPT AL Lenden

2039 94.3 WQZX AL Greenville, Q-94

2041 100.9 WALX AL Selma

June 21 Es

1755 106.3 WCIF FL Melbourne

1800 91.9 WAYL FL St Augustine, FL #100!

1813 98.9 WMMO FL Orlando

1817 100.5 WNFQ FL Newberry

1820 97.9 WSTF FL St Augustine, Star 97.9

1825 97.3 WFLC FL Miami, Coast 97.3

1831 94.3 WOLL FL Riviera Beach, Oldies  
 94.3

1834 104.9 WMLO FL Havana, Mellow 105

1835 105.3 WSTI GA Quitman, Star 105.3

1839 105.1 WOMX FL Orlando, Mix 105.1

1841 102.1 WQLC FL Watertown

1848 95.5 WOYV FL Ft Pierce

1852 95.3 WOLZ FL Ft Myers

1859 90.9 WJWV GA Ft Gaines, Peach State  
 Public Radio

1900 90.5 WBVM FL Tampa

1907 107.5 WDBN GA Wrightsville, Mix 107.5

1925 95.3 WJYF GA Nashville, Light 95.3

1932 95.3 WFMV SC S. Congaree, Gospel 95.3

2217 94.9 WTNT FL Tallahassee

June 21 Tr

1945 95.3 KIFG IA Iowa Falls

June 22 Tr

0026 107.3 KIOV IA Forest City, ex 102.3;  
 o/KEZG

June 22 Es

1108 88.1 WNCM FL Jacksonville

1111 90.9 WKTZ FL Jacksonville

June 25 Es

1057 94.3 KFST TX Ft Stockton

1100 89.1 KSTX TX San Antonio

1244 94.3 WLXP SC Marion

1247 94.5 WRNN SC Murrells Inlet

1250 92.9 WZNS SC Dillon, Z-93

1301 90.9 WLGI SC Hemingway, talk about  
 Bahai

1309 97.7 WBRP SC Georgetown, Mix 97.7, lcl  
 ads; maybe a call change coming?

1311 106.5 WSYN SC Georgetown

1314 104.1 WYAV SC Conway

1316 102.1 WMXT SC Pamplico

1321 99.7 WRFX NC Kannapolis, The Fox

1325 106.3 WCCA NC Charlotte, Beach 106.3

1326 101.3 WWQQ NC Wilmington, Double Q  
 101

1327 102.3 WJSK NC Lumberton, Country  
 102.3

1351 100.5 WKSX SC Marion, Kicks 100.5

June 26 Tr

2355 107.9 KWKS KS Winfield, Oldies 108 and  
 "WKS" IDs

June 27 Tr

0704 107.1 KTHS AR Berryville, good (3600  
 watts)

0708 102.9 KHOZ AR Harrison

0713 103.5 KQLA KS Ogden, finally moved  
 here from 103.9

0714 103.3 KTFX OK Tulsa, K-Fox

0725 99.5 KADI MO Republic

0730 95.9 KKBL MO Monett

0736 92.5 KSYN MO Joplin

0750 101.7 KGOZ MO Gallatin, Z-101.7

0753 94.3 KAMO AR Rogers

0859 97.9 KKLL MO Webb City

0901 91.3 KUAF AR Fayetteville

0914 103.5 KWXD MO Asbury

1025 107.9 KKRf IA Stuart, K-107 FM

1338 97.3 KXUS MO Springfield

June 27 Es

0920 95.3 WOBR NC Wchese

0956 96.3 WRXR SC Aiken, 96-RXR

1029 100.9 WSTS NC Fairmont

1041 107.1 WCTG SC Mullins

1044 106.5 WRDX NC Salisbury, Beach 106

1049 99.5 WMAG NC High Point

1053 103.9 WZXS NC Topsail Beach, WZX

1054 105.7 WFMX NC Statesville

1057 103.5 WRCQ NC Dunn

1100 89.5 WETS TN Johnson City

1105 98.7 WKOO NC Jacksonville

1106 98.1 WQSM NC Fayetteville

1110 94.5 WNEU NC Eden, Cat Country

1112 101.5 WRAL NC Raleigh, Mix 101.5

1113 101.1 WPCM NC Burlington, Country  
 101.1

1120 98.1 WBRF VA Galax

1126 93.9 WZZU NC Burlington

1132 96.5 WXCC WV Williamsville

1138 104.9 WVVV VA Blacksburg, Rock 105

1146 104.3 WKCY VA Harrisonburg, KCY

1154 101.5 WBQB VA Fredericksburg, B-101.5  
 1156 94.3 WFCB OH Chillicothe  
 1200 91.7 WEMC VA Harrisonburg  
 1206 99.1 WHCM WV Parkersburg  
 1211 97.9 WFGM WV Fairmont  
 1214 94.3 WRLF WV Fairmont, your home of  
 rock and roll  
 1231 99.1 WNNH NH Haverhill  
 1337 94.3 WKSL PA Greencastle  
 June 28 Es

1808 103.5 KTWC AZ Glendale, apparently a  
 call change  
 June 29 Es  
 1110 89.1 WUFT FL Gainesville  
 1116 104.1 WGLF FL Tallahassee  
 1120 107.1 WSNL GA Thomasville, Sunny 107  
 1127 97.5 WSSY AL Talladega, #40 on 97.5!  
 1133 98.9 WBAM AL Montgomery, Oldies 98  
 Total now stands at about 1315. 73

# Formats

**Tony Fitzherbert**  
 356 Jackman Avenue  
 Fairfield, CT 06430-1728

## Changes in programming status; reported by listeners

Welcome to the midsummer Formats column. As discovered on my annual railroad trip, the WRHC-1550, Coral Gables, day transmitter site, once in the middle of Biscayne Bay, is gone - a casualty of Hurricane Andrew. It will not be rebuilt, as Biscayne Bay is now subject to a lot of environmental regulations. WRHC is now operating at 500 watts from its night site, an array in the Coral Gables city dump! The old facility was an area landmark - four towers in line, atop pilings several miles off shore. It was attended, and the engineer stayed out there for a week at a time before being relieved by another engineer. Each day a tug boat would deliver diesel fuel to the generator which powered the 10,000 watt transmitter. At night the operators had little to do but watch television and tend lobster pots. As my contact told me in Miami, "It took a certain kind of individual.....". As for the trip, a lot of trains were enjoyed in Miami, New Orleans, St. Louis, and Chicago. Several Station Profiles will be appearing in DX News, saluting some extremely unusual radio stations. I have learned that the completeness of a profile is in direct relation to the number of DX'ers on staff at the station being profiled! One train on which I was riding derailed after hitting a boxcar full of kitty litter, which slipped from a freight train in Smithfield, NC - that was Astrak's Train 97, the Silver Meteor. Fortunately I was unhurt, although over 200 people were injured and the engineer died in the crash. I did hear Smithfield's WMPN-1270, with its country and gospel format, on my walkman, before resuming the trip via Delta Airlines.

From Ron Bailey, of Shelby, NC, WIST-1480, Charlotte is on the air again, with satellite-fed adult standards. This station was last WCNT, owned by the Reverend Pat Roberts, with conservative talk, sports, and business news. It failed and in 1993, the Christ Covenant Church took over the station, airing WCNV, with a mix of Unistar CNN Headline News and Christian programs. It too failed. The call, WIST, in the 1960's belonged to Charlotte's top rock station.

Eric Bueneman writes that KJSL-630, in St. Louis is "The Salt and Light of St. Louis" and is "Talk Radio Hell Nates"....the station was KKOK, and the new call stands for "King Jesus for St. Louis".

The column is from Eric Bueneman, *The M Street Journal*, and your editor aboard the Sunset Limited in Florida, en route to New Orleans. Here we go....

|     |         |                |                                                                |
|-----|---------|----------------|----------------------------------------------------------------|
| 540 | WDAK GA | Columbus       | - News, talk, and sports - four networks (M).                  |
| 550 | WCKY OH | Cincinnati     | - Talk, CBS, and NBC Talknet, here from 1530 (EB).             |
| 560 | WPHY PA | Philadelphia   | - Religion and Major Talk (M).                                 |
| 570 | WMCA NY | New York       | - Religion and Major Talk (M).                                 |
| 580 | KUBC CO | Montrose       | - SMN Oldies (M).                                              |
| 580 | KRRC TX | Lubbock        | - SMN Adult standards (M).                                     |
| 590 | WGNE FL | Panama City    | - "The Team" Sports - "The Team" is a new sports network (EB). |
| 600 | KOGO CA | San Diego      | - Unis CNN Headline News (M).                                  |
| 600 | WOKU FL | Jacksonville   | - Unistar standards (M).                                       |
| 610 | WIOD FL | Miami          | - Local talk, AP news (TF).                                    |
| 620 | WSUN FL | St. Petersburg | - News, talk, more local talk, less//WIOD (EB).                |
| 630 | WAVU AL | Albertsville   | - Southern gospel, Reach southern gospel at night (EB).        |
| 630 | WLAP KY | Lexington      | - BRN Business News (M).                                       |
| 630 | KJSL MO | St. Louis      | - Religion, was KKOK (EB).                                     |
| 640 | WOL IA  | Ames           | - News, talk, jazz, BBC World Service overnights (EB).         |

|      |         |                       |                                                                                                                                                    |
|------|---------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 540  | KGVN MT | Belgrade              | - Religion (M).                                                                                                                                    |
| 690  | WOKV FL | Jacksonville          | - Talk, here from 600 khz (M).                                                                                                                     |
| 690  | KHEY TX | El Paso               | - SMN Kool Oldies (M).                                                                                                                             |
| 710  | KMPC CA | Los Angeles           | - Talk (M).                                                                                                                                        |
| 710  | KEEL LA | Shreveport            | - Unis CNN Headline News (M).                                                                                                                      |
| 710  | NHBB MO | Kansas City           | - Country oldies and farm news//KMZU "Missouri's Farm Voice" (EB).                                                                                 |
| 710  | WDSM WI | Superior              | - Talk, sports (M).                                                                                                                                |
| 740  | WSSR FL | Boca Raton            | - Business news and traveler's info, to be listened to when tired of 980 here (TF).                                                                |
| 750  | WMXH PA | Glyphant              | - Now adult standards (M).                                                                                                                         |
| 790  | WRMS IL | Beardstown            | - JSN Country music//FM (M).                                                                                                                       |
| 790  | WLKW RI | Providence            | - SMN Adult standards (M).                                                                                                                         |
| 800  | KREI MO | Farmington            | - Adult contemporary, oldies, talk (EB).                                                                                                           |
| 800  | WOSC SC | Dillon                | - Country music//FM (M).                                                                                                                           |
| 820  | WYTA FL | Largo                 | - Talk (M).                                                                                                                                        |
| 840  | NCTG SC | Columbia              | - Religion (M).                                                                                                                                    |
| 840  | KVEG NV | North Las Vegas       | - "The Team" sports (M).                                                                                                                           |
| 850  | WREP CT | Ridgefield            | - Now oldies//WQQQ "Q-103", Sharon, CT (TF).                                                                                                       |
| 850  | WEAT FL | West Palm Beach       | - Hits from 60's to 80's//Sunny FM 104.3 (TF).                                                                                                     |
| 900  | WCKM NY | Saratoga Springs      | - Classic Rock (M).                                                                                                                                |
| 910  | KTLN AL | SMN Real Country (M). |                                                                                                                                                    |
| 910  | WHSN WI | Haywood               | - Unis oldies//FM (M).                                                                                                                             |
| 910  | WNHV VT | White River Jct.      | - Unis Adult Standards (M).                                                                                                                        |
| 920  | KESQ CA | Palm Springs          | - News, talk (M).                                                                                                                                  |
| 930  | CJCA AB | Edmonton              | - Gospel (M).                                                                                                                                      |
| 930  | WCRA IL | Effingham             | - Hot adult contemporary//WCBH-104.3 (EB).                                                                                                         |
| 930  | WIAD IL | Quincy                | - Oldies (M).                                                                                                                                      |
| 930  | WKY OK  | Oklahoma City         | - News, talk, sports (M).                                                                                                                          |
| 940  | KJPN HI | Honolulu              | - Ex-KDEO, country music, now all Japanese (M).                                                                                                    |
| 950  | KJJO MN | St. Louis Park        | - Classic country music//FM (M).                                                                                                                   |
| 980  | WNNN FL | Pompano Beach         | - "Motivation Radio", "Winner Radio", with continuous tapes to build self esteem, this must be heard to be believed - defies the imagination (TF). |
| 980  | WCVT GA | Rossville             | - SMN Urban Gold (M).                                                                                                                              |
| 980  | WNEE FL | Gulf Breeze           | - Classic soul hits (TF).                                                                                                                          |
| 980  | KSVU UT | Richfield             | - Talk (M).                                                                                                                                        |
| 1000 | WDJL AL | Huntsville            | - Urban "Love 1000" (M).                                                                                                                           |
| 1040 | WFXV FL | Boynton Beach         | - Urban "Foxy Radio" (TF).                                                                                                                         |
| 1050 | WRFS CA | Alexander City        | - SMN Real Country music (M).                                                                                                                      |
| 1060 | WZZD MS | Tupelo                | - Country music//FM (M).                                                                                                                           |
| 1070 | KENR TX | Houston               | - Brokered ethnic (M).                                                                                                                             |
| 1080 | WVCG FL | Coral Gables          | - Brokered Spanish Christian (TF).                                                                                                                 |
| 1090 | WCAR MI | Livonia               | - Brokered variety, PRN Talk (M).                                                                                                                  |
| 1130 | WNNW MI | Detroit               | - To drop country music for sports (M).                                                                                                            |
| 1140 | KCHS CA | Palm Springs          | - "The Team" sports (M).                                                                                                                           |
| 1150 | WMEX MA | Boston                | - All Spanish, ethnic (M).                                                                                                                         |
| 1170 | WAVS FL | Davie                 | - Brokered ethnic and variety (TF).                                                                                                                |
| 1200 | WNSW ME | Brewer                | - News, WNI Talk (M).                                                                                                                              |
| 1210 | WCMQ FL | Miami Springs         | - Spanish talk (M).                                                                                                                                |
| 1220 | KRGO CA | Fowler                | - Spanish oldies (M).                                                                                                                              |
| 1230 | WTKX FL | Pensacola             | - Repeating tape with travelers' info and real estate//WPLF-1290 "Florida Information Radio" (TF).                                                 |
| 1230 | WWSO FL | Quincy                | - Urban "Electric 1230" (M).                                                                                                                       |
| 1230 | KKBX OR | Gresham               | - Classical music "K-Bach" (M). Honest!! (TF).                                                                                                     |
| 1240 | WATT MI | Cadillac              | - All talk (M).                                                                                                                                    |
| 1250 | KCFI IA | Cedar Falls           | - News, talk (M).                                                                                                                                  |
| 1250 | WLEM PA | Emporium              | - Unistar country music (M).                                                                                                                       |
| 1270 | WTMQ GA | Columbus              | - Spanish (M).                                                                                                                                     |
| 1270 | KOZQ MO | Waynesville           | - PRN News, talk (M).                                                                                                                              |
| 1280 | WIFC FL | Lake Wales            | - Southern Gospel (TF).                                                                                                                            |
| 1290 | KRZE NM | Farmington            | - Country music (M).                                                                                                                               |
| 1290 | KMEN CA | San Bernardino        | - Oldies (M).                                                                                                                                      |
| 1290 | WPLF FL | Panama City Beach     | - TIS and real estate info//WTKX-Pensacola "Florida Information Radio" (TF).                                                                       |
| 1300 | WJSH IN | Terre Haute           | - SMN Real Country music (M).                                                                                                                      |
| 1300 | WQAD MS | Jackson               | - Ex-1400, still UC/gospel (M).                                                                                                                    |
| 1300 | KARC OK | Tulsa                 | - News, talk, sports (M).                                                                                                                          |
| 1300 | KACI OR | The Dalles            | - JSN Oldies (M).                                                                                                                                  |
| 1320 | WLQY FL | Hollywood             | - Ethnic, mostly Haitian (TF).                                                                                                                     |
| 1320 | WVLR VA | Lynchburg             | - Black gospel (M).                                                                                                                                |
| 1330 | KWLO IA | Waterloo              | - Oldies (M).                                                                                                                                      |
| 1340 | NDSR FL | Lake City             | - SMN Real Country (M).                                                                                                                            |
| 1340 | WITS FL | Sebring               | - Nostalgia, standards (TF).                                                                                                                       |
| 1340 | WTRN PA | Tyrone                | - Adult standards (M).                                                                                                                             |

|      |         |                                                                                           |
|------|---------|-------------------------------------------------------------------------------------------|
| 1360 | WHNR FL | Cypress Gardens - Nostalgia (TF).                                                         |
| 1360 | WXAI OH | Cincinnati - CSM Children's Programs "Radio Ash's", duopoly with WSAI-1530 (EB).          |
| 1370 | WDRB ME | Ellsworth - Adult standards (M).                                                          |
| 1380 | WLVS FL | Lake Worth - Christian, some classical music (TF).                                        |
| 1390 | WKHF FL | Avon Park - Spanish (M).                                                                  |
| 1390 | WZZB IN | Seymour - Major (network) adult contemporary music (M).                                   |
| 1390 | WADA NC | Shelby - News, talk (M).                                                                  |
| 1400 | WBCH OR | Lincoln City - Adult standards (M).                                                       |
| 1410 | WHLN KY | Harlan - JSN Oldies (M).                                                                  |
| 1420 | WBDF FL | Daytona Beach - Adult standards (TF).                                                     |
| 1420 | WPEC MA | Pittsfield - News, talk, sports (M).                                                      |
| 1420 | WHR OH  | Cleveland - Sports, talk (M).                                                             |
| 1430 | WNAV MD | Annapolis - Adult standards (M).                                                          |
| 1440 | WRAJ IL | Anna - JSN Country (M).                                                                   |
| 1440 | WPRS IL | Paris - Standards, talk (M).                                                              |
| 1450 | WBSR FL | Pensacola - Nostalgia, adult standards (TF).                                              |
| 1470 | KICL LA | Lake Charles - "The Team" sports (M).                                                     |
| 1470 | KBCW MN | Brooklyn Park - Standards//KLBB (M).                                                      |
| 1490 | WEIR FL | Winter Haven - Adult contemporary "The right music mix." (TF).                            |
| 1490 | KOWC CA | South Lake Tahoe - News, talk, sports (M).                                                |
| 1490 | WKRO IL | Chiro - JSN Oldies (M).                                                                   |
| 1490 | WTUP MS | Tupelo - Sports (M).                                                                      |
| 1490 | WGMP NY | Watkins Glen - SMN Adult contemporary (M).                                                |
| 1490 | WAZL PA | Hazleton - Unistar 41 adult contemporary (M).                                             |
| 1510 | KCTF MO | Independence - "The Team" sports (M).                                                     |
| 1510 | KTTT NE | Columbus - Unistar oldies (M).                                                            |
| 1530 | WSAI OH | Cincinnati - NBC News, Unistar AM Only, nostalgia, soft adult contemporary, ex-1360 (EB). |
| 1540 | WJTT TN | Jellico - Southern Gospel "Hymns for Him" (M).                                            |
| 1550 | WRHC FL | Coral Gables - Cuban talk, from 500 watt night site (TF).                                 |
| 1550 | WCSJ IL | Morris - SMN adult standards (M).                                                         |
| 1550 | KICS NE | Hastings - News, talk (M).                                                                |
| 1560 | WATJ OH | Chardon - Adult standards (M).                                                            |
| 1560 | KKID OK | Sallisaw - PRN News, talk (M).                                                            |
| 1560 | KWCO OK | Chickasha - Adult contemporary//KOKK 105.5 (EB).                                          |
| 1570 | WTMB FL | Auburndale - Gospel music, religion, and ABC News (TF).                                   |
| 1570 | WQAI FL | Fernandina Beach - Full service country (M).                                              |
| 1570 | KQWC IA | Webster City - Talk//FM (M).                                                              |
| 1570 | WRHD NY | Riverhead - New rock//FM (M).                                                             |
| 1580 | WGRF FL | Ft. Lauderdale - Brokered ethnic, otherwise//WSHE-FM with adult contemporary music (TF).  |
| 1580 | WOXR AL | Oxford - SMN Adult standards (M).                                                         |
| 1590 | WZZJ AL | Moss Point - Religion "Light for the Gulf Coast" (TF).                                    |
| 1590 | WPMZ FL | Riveria Beach - Black gospel (TF).                                                        |
| 1590 | WPCO IN | Mt Vernon - JSN Soft adult contemporary//FM (M).                                          |
| 1590 | WZRX MS | Jackson - Black gospel (M).                                                               |
| 1600 | KLLZ MN | Walker - Classic rock//FM (M).                                                            |

Plenty to read at the beach! Enjoy the summer, and I hope to join you for part of the convention up in the great state of New Hampshire!

**WING**

73's.

**Professional Sports Networks**  
**Barry S. Finkel** BSFINKEL@ANL.gov  
 10314 S. Oakley  
 Chicago, IL 60643-2409  
 Network listings for team sports stations

Due to some unknown errors in my software, four of the MLB lists in the last column had missing entries. There were some missing stations at the top of the second columns. Below are the corrected lists plus others. The same footnotes are repeated here from the last column. (The file I had sent to Paul were incorrect, but when I reran my software the resulting files were correct!)

I have a copy of the 1994 Saint Louis Cardinals network list (from Tom Reiser, who lives a mile from me), but as it clearly states "not for publication", I cannot reproduce it here.

Send me lists and/or corrections to me; my Internet address is BSFINKEL@ANL.GOV  
 Here are some miscellaneous updates from Jon M. Ohman and Marc DeLorenzo (via \$0.29 snailmail), Doug Smith, Eric Bueneman, Bob Karchevski, Ken MacHarg (HCJB Quito, EC), and Dave Braun (via Internet): The Cincinnati team is the 'Reds', not the 'Redlegs'. In the Cincinnati

Reds list, 1270 WXVW-IN is actually on 1450. Don Drysdale is no longer a Dodgers announcer, as he died in 1993. He has been replaced by Rick Monday. The Philkes' flagship has changed calls from 1210 WOGL-PA to 1210 WGMP. The Braves flagship is not 94.9 WFCH-GA, only 640/105.7 WGST-GA. On 640, Rush Limbaugh takes precedence, forcing the flagship to FM only. The Rockies' Spanish Flagship is KCUV, not my typo-ed WCUV. The Montreal Expos' games are also carried on 6005 CFCX (shortwave), which simulcasts CIQC fulltime. The Oakland Athletics' color commentator is Ray Fosse, and should have been listed after Bill King and Lon Simmons.

The Nashville Sounds (AAA) are on 1590 WDBL-TN and 94.3 WDBL TN in addition to the listed 99.7 WWTN-TN. These are the only three stations carrying the Sounds. The Nashville Xpress (AA) are not on radio at all (although they are co-owned with the Sounds). The New Orleans Zephyrs (AAA) backup station is 1350 W5MB-LA, not the listed 1280 WMSB, which is actually has calls WQUE. The Tacoma Tigers' (AAA) station is in WA, not NB. The Birmingham Barons' (AA) station is in AL, not AB. The Chattanooga Lookouts' (AA) last known flagship was 1370 WDEF-TN. The Jackson Generals' (AA) station on 620 has calls WJDX, not WJDS. The Midwest League (A) did have a Springfield, IL Cardinals last season. The games were on 96.7 WCVS-IL and 95.9 WCNL-IL. That franchise might have moved this season. The Columbus Redstox's (A) flagship on 540 now has calls WDAK. The Watertown Indians' (short A) flagship station is in NY, not my typoed IN. The Everett Giants' (short A) flagship, KRKO, is on 1380. The New Jersey Cardinals (A) are also heard on 1160 WVNJ-NJ, 1500 WGMT-NJ, and 102.3 WSUS-NJ. The Wilmington Blue Rocks (A) are also heard on 900 WSSR-DE, 1410 WDOV-DE, and 101.7 WNNN-NJ.

| Chicago Cubs 1994       |           |      |           | Harry Caray, Thom Brennaman, Ron Santo  |           |      |               |
|-------------------------|-----------|------|-----------|-----------------------------------------|-----------|------|---------------|
| 570                     | WNAX-SD   | 1250 | WIZZ-IL   | 1410                                    | WGRD-MI   | 1550 | KAPB-MO 98.5  |
| 720                     | WGN-IL *  |      | WGL-IN    | 1440                                    | WGEN-IL   | 1560 | WRIN-IN 102.3 |
| 910                     | WQOL-IL   | 1290 | WRLI-IL   | 1450                                    | WFMB-IL   | 1570 | WAKO-IL 103.1 |
| 920                     | WHOK-IL   | 1310 | KOKX-IA   | 1460                                    | WKAM-IN   | 1570 | WIFF-IN 104.9 |
| 930                     | WHON-IN   |      | WGH-VA    |                                         | KENO-NV   | 1590 | KWBG-IA       |
| 960                     | WSBT-IN   | 1320 | WNGO-KY   | 1470                                    | WQSN-MI   |      | WAXI-IN 105.5 |
| 1020                    | WCIL-IL   | 1330 | WRAM-IL h | 1480                                    | WRSW-IN   | 1600 | KCRG-IA 107.1 |
| 1050                    | WDZ-IL    | 1350 | KRNT-IA   | 1490                                    | WIDN-IL   |      | WBNL-IN 107.3 |
| 1050                    | WTCA-IN h | 1370 | KDTH-IA   | 1500                                    | WGEN-IL h |      |               |
| 1060                    | WRHL-IL   | 1380 | WCIM-IA   | 1510                                    | WINI-IL   | 94.1 | WGL-IN        |
| Milwaukee Brewers 1994  |           |      |           | Bob Uecker, Pat Hughes                  |           |      |               |
| 550                     | WSAU-WI   | 1150 | WHBY-WI   | 1340                                    | WLDY-WI   | 1590 | WTOQ-WI 97.1  |
| 570                     | WMAM-WI   | 1230 | WIKB-MI   | 1380                                    | WBLI-WI   |      | WCOM-WI 98.3  |
| 580                     | WKTY-WI   |      | WCLO-WI   | 1400                                    | WATW-WI   | 92.1 | WRJC-WI 99.1  |
| 590                     | WJMS-WI   | 1240 | WJOD-MI   |                                         | WRIZ-WI   |      | WRLS-WI 99.3  |
| 620                     | WTMJ-WI * |      | WJMG-WI   |                                         | WDUZ-WI   | 92.3 | WJPD-MI       |
| 680                     | WDBC-MI   |      | WOBT-WI   |                                         | WRDB-WI   | 92.7 | WDUX-WI 100.1 |
| 910                     | WDOR-WI   |      | WOMT-WI   | 1430                                    | WBEV-WI   |      | WLDY-WI 100.9 |
| 1150                    | ACKY-AZ j | 1400 | KADR-IA   | 1540                                    | WBNI-IN   | 96.9 | WLBH-IL       |
| 1170                    | WLBH-IL   |      | WDWS-IL   | 1550                                    | KIWA-IA   | 97.7 | WFXZ-IL h     |
| 1250                    | KCFI-IA   |      | WBAT-IN   |                                         | WJL-IN h  |      | WMOT-IL h     |
| Pittsburgh Pirates 1994 |           |      |           | Lanny Frattare, Greg Brown, Steve Blass |           |      |               |
| 590                     | WMBS-PA   | 1270 | WCBC-MD   | 1400                                    | WVWK-WV   | 1490 | WOHL-OH 92.3  |
| 600                     | WFRM-PA   | 1280 | WKEF-PA   | 1420                                    | WBRD-FL   |      | WESB-PA 93.5  |
| 940                     | WESA-PA   | 1310 | WNAE-PA   | 1430                                    | WVAM-PA   |      | WMGW-PA 94.7  |
| 990                     | WVSC-PA   | 1330 | WASN-OH   |                                         | WEIR-WV   |      | WNTJ-PA 100.9 |
| 1000                    | WTOO-PA   |      | WFIP-PA   | 1440                                    | WAJR-WV   |      | WTCZ-WV 102.1 |
| 1020                    | KDKA-PA * |      | WETZ-WV   | 1450                                    | WFER-PA   | 1540 | WECZ-PA 103.1 |
| 1050                    | WMSG-MD   | 1340 | WCVI-PA   |                                         | WJPA-PA   | 1570 | WANR-OH 105.5 |
| 1050                    | WADC-WV   |      | WTRN-PA   |                                         | WMAJ-PA   | 1580 | WANB-PA 107.1 |
| 1160                    | WCCS-PA   |      | WHAR-WV   | 1460                                    | WMBA-PA   | 1590 | WCBG-PA       |
| 1230                    | WBVP-PA   | 1350 | WOYK-PA   | 1470                                    | WZGO-PA   | 1600 | WPDG-PA       |
| 1230                    | WTIV-PA   | 1400 | WLIB-PA   | 1480                                    | WCNS-PA   |      |               |
| 940                     | WFAW-WI   | 1260 | WEKZ-WI   |                                         | WRDN-WI   | 93.7 | WEKZ-WI 102.3 |
| 960                     | WTCH-WI   |      | WWIS-WI   | 1450                                    | KFIZ-WI   | 93.9 | WDOR-WI 105.3 |
| 970                     | KXTF-WI   | 1270 | WRJC-WI   |                                         | WDLB-WI   | 94.3 | WPRE-WI 106.3 |
| 980                     | WPRE-WI   | 1290 | WCOW-WI   |                                         | WRCO-WI   | 94.5 | WRJO-WI       |

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| 1010 WSPQ-WI | 1310 WIBA-WI | 1490 WIGM-WI | 95.9 WRDN-WI |
| 1050 WUP-WI  | 1320 WFHR-WI | 1550 WEVR-WI | 96.3 WJMC-WI |
| 1090 WISS-WI | 1330 WHAL-WI | WHR-WI       | 96.7 WATW-WI |

### Oakland Athletics 1994 (EE) Ray Fosse, Bill King, Lon Simmons

|               |              |              |              |              |
|---------------|--------------|--------------|--------------|--------------|
| 570 KCNO-CA   | 1080 KSCO-CA | 1340 KKTR-CA | 1410 KMYC-CA | 1490 KBLF-CA |
| 610 KFRG-CA * | 1270 KCBX-CA | 1360 KNNS-AZ | 1450 KTHP-CA | KRKC-CA      |
| 950 KAHF-CA   | 1280 KJAX-CA | 1400 KJLD-CA | KVML-CA      |              |
| 970 KBEE-CA   | 1300 KPMO-CA | KQMS-CA      | KOZZ-CA      |              |
| 980 KINS-CA   | 1320 KCTC-CA | KUKI-CA      | KYOS-CA      |              |

### Kansas City Royals 1994 Denny Mathews, Fred White (via Todd Brandenburg)

|               |              |              |              |               |
|---------------|--------------|--------------|--------------|---------------|
| 560 KWTQ-MO   | 1230 KTNC-NE | 1420 KBTN-MO | 1590 KVBG-KS | 97.7 KNCY-NE  |
| 580 WISW-KS * | 1240 KJUL-KS | KZMO-MO      | 1600 KDMO-KS | 99.3 KUTT-NE  |
| 610 WDAF-MO   | KNEM-MO      | 1430 KKOZ-MO | KTTN-MO      | 99.9 KBFL-MO  |
| 620 KMNS-IA   | KFOR-NE      | 1440 KCHE-IA | KNCY-NE      | 100.3 KQIS-KS |
| 680 KPEQ-MO   | 1270 KTRT-OK | 1450 KWBW-KS |              | 100.9 KCLY-KS |
| 690 KGGF-KS   | 1280 ASOK-KS | KOKO-MO      | 92.1 KCHE-IA | 101.1 KFNF-KS |
| 750 KJBL-MO   | 1290 KLEH-IA | KLMX-NM      | WCAZ-IL      | KLRK-MO       |
| 790 KXXX-KS   | KWLS-KS      | KYNT-SD      | KMZA-KS      | 101.7 KJND-KS |
| 860 KKOW-KS   | 1300 KMMO-MO | 1460 KKOY-KS | KMOE-MO      | 102.9 KMMO-MO |
| 880 KVRN-NE   | 1310 KPSB-MO | 1470 KYUU-KS | KTTN-MO      | 103.1 KNDY-KS |
| 960 KMA-IA    | KGMT-NE      | KERB-MO      | 92.3 KBUG-MO | 103.7 KJRK-MO |
| 960 KNEB-NE   | 1350 KTOB-AR | 1480 KZSN-KS | 93.5 KLCR-KS | 103.9 KNZA-KS |
| 990 WCAZ-IL   | 1340 KGFV-NE | 1490 KXLO-IA | KWME-KS      | KOMB-KS       |
| 990 KRMV-MO   | 1350 KMAN-KS | KDMO-MO      | 94.3 KZMO-MO | KCHI-MO       |
| 1010 KCHI-MO  | 1370 KGNU-KS | KTRT-MO      | 94.5 KZLU-KS | KNLV-NE       |
| 1060 KNLV-NE  | KAWL-NE      | 1510 KANS-KS | KDKD-MO      | KQSM-KS       |
| 1150 KWKY-IA  | 1390 KAMO-AR | KMRP-MO      | KNMV-MO      | KXKK-MO       |
| 1150 KSAL-KS  | KNCR-KS      | 1530 KMAN-MO | 95.9 KCAV-KS | KCOE-NE       |
| 1150 KRNK-MO  | KAYS-KS      | 1540 KIKC-KS | KANV-MO      | 106.3 KYOO-MO |
| 1190 KVSF-KS  | KVOE-KS      | KNGLS-KS     | 96.7 KANS-KS | 106.7 KFXS-KS |
| 1200 KYOO-MO  | 1420 KJCK-KS | 1550 KKLE-KS | KBBE-KS      |               |
| 1220 KOMC-MO  | KULY-KS      | 1580 KVMV-MO | 97.7 KAYQ-MO |               |

The flagship station is WISW Topeka, not WDAF Kansas City.

### New York Mets 1994 Bob Murphy, Gary Cohen, Howie Rose (pre/post-game)

(from team scorebook via Jon N. Ohman)

|               |              |              |               |
|---------------|--------------|--------------|---------------|
| 660 WFAN-NY * | 1190 WSCN-NY | 1490 WCIO-NY | 1590 WPSL-FL  |
| 870 WHCU-NY   | 1340 WALL-NY | 1540 WPTV-NY |               |
| 930 WJZR-NY   | 1450 WKLP-NY | 1570 WFLR-NY | 101.7 WBAZ-NY |

### Boston Red Sox 1994 Joe Castiglione, Jerry Trupiano

(from 1994 "Scorebook Magazine" via Jon N. Ohman)

|               |              |              |              |               |
|---------------|--------------|--------------|--------------|---------------|
| 560 WHYN-MA   | 1200 WFOV-MA | 1340 WSTV-VT | 1420 WBEC-MA | 1510 WNLC-CT  |
| 580 WTAE-MA   | 1230 WNAW-MA | 1350 WDNY-CT | WBSM-MA      |               |
| 610 WGRB-ME   | WQDY-ME      | 1370 WDEA-ME | WFSB-VT      | 92.7 WOXO-ME  |
| 620 WZON-ME   | WTSV-ME      | 1380 WNRJ-RI | 1450 WKXL-ME | WQDY-ME       |
| 630 WPRO-RI   | WMOU-NH      | WYSB-VT      | WKRJ-RI      | 99.3 WKTV-ME  |
| 680 WRKO-MA * | WERI-RI      | 1400 WILL-CT | 1480 WSAR-MA | 100.7 WTBH-ME |
| 730 WJTO-ME   | WJOY-VT      | WHMP-MA      | 1490 WMRC-MA | 100.9 WGTB-MA |
| 800 WLAD-CT   | 1240 WHAI-MA | WIDE-ME      | WENJ-ME      | 102.5 WQSS-ME |
| 910 WFNS-FL   | 1250 WARE-MA | WLTV-ME      | WTVL-ME      | 103.1 WDME-ME |
| 970 WESO-MA   | 1270 WTSN-ME | WNGE-ME      | WFDV-VT      |               |
| 1080 WTKT-CT  | 1280 WEIM-MA | WTSI-ME      | WIKV-VT      |               |
| 1140 WLPZ-ME  | 1290 WENE-ME | WLSJ-CT      | WKVT-VT      |               |

### Boston Red Sox (SS) 1994 Bobby Serrano, Hector Martinez

950 WROL-MA \* (Carrier Radio Network) ? -CT Hartford ? -MA Lawrence ? -MA Springfield ? -RI Providence

\* Flagship station is This station broadcasts both White Sox & Cubs. 1 This station broadcasts both Orioles & Pirates. 1 This station broadcasts both Rockies & Cubs

## Verification Signers

Signatures and other information received upon request

| Pres. Call   | Signer                            | Contributor |                    |                             |       |
|--------------|-----------------------------------|-------------|--------------------|-----------------------------|-------|
| 540 WGTOLn   | Dave Edwards TA                   | aw          | 1140 KSOOb         | Vincent Fuhs CnB            | EB    |
| 540 WSTH     | Valerie W Alexander TrM           | DT          | 1140 WBR           | Butch Menefee GM            | DJ    |
| 550 WAYRiz   | Dick Weer D                       | RT          | 1150 CKOCib        | Nevin E. Grant PD           | RT    |
| 620 WMTI     | Dean Taylor PD                    | DJ          | 1160 KSH           | John Dehael CE              | DT    |
| 640 KGVWib   | U/U                               | aw          | 1180 WFGNlb        | Charles A. Montgomery OpM/V | RT    |
| 650 HJKBiq   | Antonio Garcia PD                 | EB          | 1180 WDSI          | Perry Brown PD              | EB    |
| 650 WSMqibuz | Tom Bantam PM                     | EB          | 1190 KBCOib        | Scott Simmons               | EB    |
| 660 WFANq    | Edward Knapp CE                   | RT          | 1210 WBIU          | Danny Church PD             | DJ    |
| 690 WJOXiz   | Dawn Morse TrM                    | RT          | 1240 WTAXim        | Glen E. Hopkins CE          | EB    |
| 700 WLW      | Paul Jellison ACE                 | DJ          | 1260 WEKzh         | Van Steiner CE              | aw/RT |
| 720 WCCR     | Randy C. Barton                   | DJ          | 1260 WNRKqm        | Dave Schmidt CE NRC         | RT    |
| 720 WYMY     | Patricia Mellon Rodgers NaD       | DJ          | 1270 WMIzi         | David Schunk CE NRC         | EB    |
| 730 WFMW     | Danny Kocher PD                   | DJ          | 1300 WJFKim        | Dan Ryson CE                | MH    |
| 740 KTRC     | Errol R. Coker CE                 | DT          | 1328 Radio Realtyp | Michael Howard P            | aw    |
| 760 WENO     | John Wesley                       | DJ          | 1340 KXEOp         | Gary Leonard GM/CE          | EB    |
| 770 HJXJ     | Antonio Pardo Garcia Gte          | DT          | 1380 WKJvib        | Randy C. Barton GM          | RT    |
| 780 KXOHib   | Martin Stalbert CE                | aw          | 1380 WKJvib        | Lamar Owen CE               | RT    |
| 780 TIBAl    | Juan Sepulveda M                  | DT          | 1380 WRCQ          | Roger F. Schyman NaD        | DT    |
| 800 PJBqiz   | Sally Park                        | RT          | 1380 WTOBm         | Gregory Epperson            | RT    |
| 840 CMKCI    | Sergio Martinez Martinez Gte      | DT          | 1400 WJZM          | Amy Scott Na                | DJ    |
| 850 KOAQ     | Jan Chadwell CE                   | DT          | 1420 KUJlu         | Kevin Cole PD               | aw    |
| 860 CJBQiz   | Diane Belhumeur                   | RT          | 1440 KMAJpnz       | Chris Randal OpM            | aw    |
| 890 CJDCh    | Jean Braden TrM                   | aw          | 1450 WYUIM         | Robert Combs CE             | DT    |
| 900 KBIFpu   | U/U                               | WH          | 1460 WCEIiz        | David W. Schmidt CE NRC     | RT/EB |
| 900 XEWib    | Miguel Angel Barmientos Valdez TD | DT          | 1460 WDXngibm      | Mark Baker CE               | RT    |
| 910 WFNSc    | Mark Gudzik                       | DT          | 1490 WTUP          | Rusty Pugh O/M              | DT    |
| 920 XETAAiz  | Jose de Leon Flores Gte           | aw          | 1530 WCKY          | Bruce I. Snell O/M          | DJ    |
| 930 WBLI     | Vernon R. Alpine CE               | RT          | 1550 WSER          | Mark A. Crouch GM/CE        | RT    |
| 930 WYNIic   | Harold Harris CE                  | RT          | 1570 KCVRibm       | Damien Thorn CE             | aw    |
| 960 WAAKlu   | Billy D. Martin P                 | RT          | 1580 KR2Ipbu       | R.E. Lauch GM               | aw    |
| 1000 WVVLI   | Nick Russell M                    | DT          | 1600 KCRGqb        | U/U                         | aw    |
| 1020 CCR     | U/U                               | DT          | 1620 WNEZ748p      | Barry Chafetz VPOp          | MH    |
| 1020 CCBq    | U/U                               | RT          | 1675 "D"q          | William Hensel WDOFQK       | WH    |
| 1020 KDKA    | Mal Check                         | DJ          |                    |                             |       |
| 1040 WHOq    | U/U                               | EB          |                    |                             |       |
| 1050 CHUM    | B.J. Carnegie CE                  | DJ          |                    |                             |       |
| 1070 WEKT    | Marshall Sudebottom P/GM          | DJ          |                    |                             |       |
| 1100 ZDKic   | Miss Stancel Rose                 | DT          |                    |                             |       |
| 1130 KBMRib  | Andy Anderson CE                  | RT          |                    |                             |       |
| 1130 KBMRq   | A.L. "Andy" Anderson CE           | EB          |                    |                             |       |

### Contributors

|                 |         |
|-----------------|---------|
| Don Trelford    | Jamaica |
| David Jones     | LA      |
| Eric Bueneeman  | MO      |
| Mike Hardesier  | NC      |
| Robert J. Tlora | NC      |
| John Wilkins    | CO      |
| Wayne Heinen    | CO      |

From NRC's DX Audio Service ...

## 'After Dark 4

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# Geomagnetic Summary

Phil Bytheway bytheway@ATK.com

9705 Mary NW  
Seattle, WA 98117-2334

High "A" values indicate possible auroral conditions

May 8 1994 through June 4 1994

Soft copies of this report available through phil\_bytheway@atk.com

GEO - Geomagnetic activity . . . . . pca - polar cap absorption  
maf - major flare . . . . . SA - Solar Activity  
mas - major storm . . . . . spe - satellite proton event  
mus - minor storm . . . . . SS - severe storm



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## Bruce Eving's FM Atlas ..15th edition

The world-famous guide which has served FM DX'ers for over 20 years is available from NRC Publications at the special price of \$16.00. NY orders, please add sales tax.

## Silent Stations . . . compiled by Wayne Heinen

These stations have all been listed as silent. Members who DX near these stations are requested to monitor the frequencies, and if the stations are no longer silent to contact Wayne as soon as possible so that the station's listing in the next edition of the NRC Log may be corrected. Thanks!

| Freq | Call  | City              | ST | When listed |       |      |      |                  |    |              |
|------|-------|-------------------|----|-------------|-------|------|------|------------------|----|--------------|
| 1480 | WARI  | Abbeville         | AL | Silent      | 9/90  | 1580 | WBGB | Mount Dora       | FL | Silent 9/88  |
| 1090 | WXBK  | Albertville       | AL | Silent      | 6/92  | 1550 | WBH  | New Smyrna Beach | FL | Silent 1/93  |
| 1590 | WACD  | Alexander City    | AL | Silent      |       | 1080 | WJOE | Port St Joe      | FL | Silent 11/92 |
| 1080 | WLVN  | Brantley          | AL | Silent      | 1/94  | 1400 | WULF | Alma             | GA | Silent 6/94  |
| 1560 | WTKN  | Daleville         | AL | Silent      | 2/93  | 1290 | WDEC | Americus         | GA | Silent 4/93  |
| 1470 | WJFK  | Evergreen         | AL | Silent      | 08/93 | 1360 | WYSE | Bainbridge       | GA | Silent 3/91  |
| 810  | WJXL  | Jacksonville      | AL | Silent      | 1/92  | 1260 | WBBK | Blakely          | GA | Silent 7/92  |
| 1000 | WZTN  | Montgomery        | AL | Silent      | 11/92 | 1330 | WPPI | Carrollton       | GA | Silent 2/94  |
| 960  | WLPR  | Prichard          | AL | Silent      |       | 1470 | WCLA | Claxton          | GA | Silent 11/93 |
| 1570 | WTQX  | Selma             | AL | Silent      | 10/93 | 1500 | WDPC | Dallas           | GA | Silent 1/94  |
| 1300 | KAKQ  | Fairbanks         | AK | Silent      | 8/87  | 990  | WHIA | Dawson           | GA | Silent 7/91  |
| 830  | KABN  | Long Island       | AK | Silent      | 3/90  | 1520 | WNMT | Garden City      | GA | Silent 7/91  |
| 840  | KSDP  | Sand Point        | AK | Silent      | 6/94  | 1490 | WYYZ | Jasper           | GA | Silent 5/93  |
| 710  | KUET  | Black Canyon City | AZ | Silent      | 1/92  | 1570 | WGRS | Millen           | GA | Silent 3/91  |
| 1260 | KFAS  | Casa Grande       | AZ | Silent      | 11/92 | 1000 | WJHH | Soperton         | GA | Silent 3/91  |
| 690  | KCLS  | Flagstaff         | AZ | Silent      | 4/94  | 1230 | WAYX | Waycross         | GA | Silent 12/93 |
| 1180 | KYET  | Williams          | AZ | Silent      | 3/94  | 1100 | WCGA | Woodbine         | GA | Silent 10/88 |
| 1330 | KFCA  | Conway            | AR | Silent      | 5/93  | 1170 | KOHO | Honolulu         | HI | Silent 5/93  |
| 1470 | KDEW  | De Witt           | AR | Silent      | 12/93 | 1460 | KULA | Maunawili        | HI | Silent 5/94  |
| 1110 | KGPL  | Dermott           | AR | Silent      | 2/94  | 1240 | KMCL | McCall           | ID | Silent       |
| 1530 | KLRA  | England           | AR | Silent      | 11/92 | 1400 | KIGO | St. Anthony      | ID | Silent 1/91  |
| 1190 | KMOA  | Kensett           | AR | Silent      |       | 1450 | KEZJ | Twin Falls       | ID | Silent 6/93  |
| 1440 | KKIP  | Lowell            | AR | Silent      | 1/93  | 980  | KSGM | Chester          | IL | Silent 10/93 |
| 1460 | KZOT  | Marianna          | AR | Silent      |       | 1540 | WADM | Decatur          | IN | Silent 4/93  |
| 1380 | KPAL  | North Little Rock | AR | Silent      | 6/92  | 1450 | WLYV | Fort Wayne       | IN | Silent 5/93  |
| 1460 | KCCCL | Paris             | AR | Silent      | 4/93  | 1290 | WDGS | New Albany       | IN | Silent       |
| 1270 | KPBA  | Pine Bluff        | AR | Silent      | 2/90  | 1110 | WYIC | Noblesville      | IN | Silent 1/92  |
| 1530 | KXRQ  | Trumann           | AR | Silent      | 2/93  | 1360 | KSRX | El Dorado        | KS | Silent 6/94  |
| 1530 | KCTT  | Yellville         | AR | Silent      |       | 1250 | KFKU | Lawrence         | KS | Silent 9/87  |
| 1490 | KMET  | Banning           | CA | Silent      | 6/93  | 1410 | WLBJ | Bowling Green    | KY | Silent 1/92  |
| 1050 | KBBV  | Big Bear Lake     | CA | Silent      | 1/92  | 1000 | WKLO | Danville         | KY | Silent 3/91  |
| 1540 | KMBY  | Capitola          | CA | Silent      | 6/94  | 1440 | WCDS | Glasgow          | KY | Silent 11/92 |
| 890  | KPTO  | Citrus Heights    | CA | Silent      | 6/92  | 1150 | WLOC | Munfordville     | KY | Silent 06/94 |
| 1480 | KKIS  | Concord           | CA | Silent      | 10/92 | 1480 | WNKY | Neon             | KY | Silent 7/93  |
| 1030 | KIOQ  | Poisom            | CA | Silent      | 6/92  | 1470 | WBUL | Shepherdsville   | KY | Silent 6/93  |
| 1220 | KRGO  | Fowler            | CA | Silent      | 5/94  | 1340 | KMYQ | Bastrop          | LA | Silent 11/91 |
| 1320 | KQIQ  | Lemoore           | CA | Silent      | 6/92  | 1470 | KTDL | Farmerville      | LA | Silent 6/92  |
| 1330 | KLOM  | Lompoc            | CA | Silent      | 6/92  | 1090 | WSTG | Gonzales         | LA | Silent 1/94  |
| 1460 | KRQC  | Salinas           | CA | Silent      | 5/90  | 1360 | KDXI | Mansfield        | LA | Silent 9/91  |
| 1510 | KIID  | San Rafael        | CA | Silent      | 4/94  | 900  | KREH | Oakdale          | LA | Silent 3/91  |
| 1310 | KMYX  | Taft              | CA | Silent      | 4/94  | 1380 | WKTJ | Farmington       | ME | Silent 9/92  |
| 1340 | KOMY  | Watsonville       | CA | Silent      | 4/91  | 1340 | WLVC | Fort Kent        | ME | Silent 4/94  |
| 1420 | KYVU  | Yucca Valley      | CA | Silent      | 7/92  | 1400 | WALZ | Machias          | ME | Silent       |
| 1450 | KDMN  | Buena Vista       | CO | Silent      | 6/93  | 710  | WREM | Monticello       | ME | Silent       |
| 930  | KRKY  | Granby            | CO | Silent      | 9/93  | 1520 | WHRF | Bel Air          | MD | Silent 2/94  |
| 1000 | KIDN  | Hayden            | CO | Silent      | 1/92  | 540  | WDMV | Pocomoke City    | MD | Silent 1/93  |
| 1120 | KLIM  | Limon             | CO | Silent      | 11/92 | 960  | WFGL | Fitchburg        | MA | Silent 12/91 |
| 810  | KRGS  | Rifle             | CO | Silent      | 9/93  | 930  | WREB | Holyoke          | MA | Silent 10/91 |
| 1320 | KAVI  | Rocky Ford        | CO | Silent      | 1/91  | 1000 | WCMX | Leominster       | MA | Silent 9/92  |
| 1590 | WQQW  | Waterbury         | CT | Silent      | 6/92  | 1530 | WCEG | Middleboro       | MA | Silent 8/93  |
| 1280 | WECY  | Seaford           | DE | Silent      | 5/94  | 1230 | WNEB | Worcester        | MA | Silent 10/91 |
| 1380 | WAMS  | Wilmington        | DE | Silent      | 5/91  | 1250 | WXOX | Bay City         | MI | Silent 9/92  |
| 1490 | WJRB  | Bradenton         | FL | Silent      | 4/93  | 990  | WABX | Clare            | MI | Silent 3/90  |
| 1340 | WVFL  | Clermont          | FL | Silent      | 1/90  | 1430 | WBRB | Mount Clemens    | MI | Silent 4/91  |
| 1010 | WCNU  | Crestview         | FL | Silent      | 12/92 | 1150 | WCEN | Mount Pleasant   | MI | Silent 3/94  |
| 1280 | WGTX  | De Funiak Springs | FL | Silent      | 6/93  | 1060 | WBMB | West Branch      | MI | Silent       |
| 1120 | WBZR  | Destin            | FL | Silent      | 3/91  | 640  | WISZ | Zeeland          | MI | Silent 1/91  |
| 1400 | WNUE  | Fort Walton Beach | FL | Silent      | 11/93 | 980  | KRXX | Richfield        | MN | Silent 4/94  |
| 1280 | WVSU  | Jacksonville      | FL | Silent      | 5/93  | 1370 | KMAP | South St. Paul   | MN | Silent 2/90  |
| 1600 | WKWF  | Key West          | FL | Silent      | 10/92 | 630  | WDGY | St. Paul         | MN | Silent 6/94  |
| 1220 | WMJK  | Kissimmee         | FL | Silent      | 3/94  | 1240 | WWZQ | Aberdeen         | MS | Silent 1/94  |

|      |      |                     |    |        |       |      |      |                            |          |        |       |
|------|------|---------------------|----|--------|-------|------|------|----------------------------|----------|--------|-------|
| 1170 | WDAF | Amory               | MS | Silent | 3/91  | 1130 | WEEQ | Waynesboro                 | PA       | Silent | 7/92  |
| 1340 | WJMB | Brookhaven          | MS | Silent | 7/93  | 1340 | WYCK | Wilkes-Barre               | PA       | Silent | 6/94  |
| 1580 | WZFL | Centreville         | MS | Silent | 3/85  | 1350 | WBEM | Windber                    | PA       | Silent | 11/91 |
| 900  | WDDT | Greenville          | MS | Silent | 5/90  | 1370 | WKFD | Wickford                   | RI       | Silent | 6/92  |
| 1130 | WQFX | Gulfport            | MS | Silent | 6/92  | 1590 | WABV | Abbeville                  | SC       | Silent | 9/91  |
| 1230 | WHSY | Hattiesburg         | MS | Silent | 6/94  | 1300 | WRXR | Aiken                      | SC       | Silent | 12/91 |
| 1460 | WGUD | Moss Point          | MS | Silent | 2/94  | 1510 | WRKU | Burnettown                 | SC       | Silent | 9/91  |
| 1410 | WMYQ | Newton              | MS | Silent | 12/91 | 1130 | WVEF | Camden                     | SC       | Silent | 9/90  |
| 1440 | WSEL | Pontotoc            | MS | Silent | 12/93 | 1490 | WGCD | Chester                    | SC       | Silent | 10/93 |
| 1260 | WCSA | Ripley              | MS | Silent |       | 1360 | WLWZ | Easley                     | SC       | Silent | 4/94  |
| 1320 | WVLY | Water Valley        | MS | Silent |       | 1470 | WLMC | Georgetown                 | SC       | Silent | 12/92 |
| 1530 | WJNS | Yazoo City          | MS | Silent |       | 1000 | WKYB | Hemingway                  | SC       | Silent | 3/92  |
| 1580 | KTGR | Columbia            | MO | Silent | 4/93  | 1430 | WKXS | Marion                     | SC       | Silent | 10/92 |
| 1570 | KLEX | Lexington           | MO | Silent | 11/93 | 1450 | WKEL | Myrtle Beach               | SC       | Silent | 5/92  |
| 1140 | KCXL | Liberty             | MO | Silent | 3/92  | 1070 | WHYZ | San Souci                  | SC       | Silent | 2/94  |
| 1560 | KLTI | Macon               | MO | Silent | 11/93 | 1270 | WYAK | Surfside Beach-Garden City | SC       | Silent | 12/93 |
| 1510 | KMRP | Marshfield          | MO | Silent | 1/94  | 960  | WEAB | Adamsville                 | TN       | Silent | 5/93  |
| 1440 | KFPS | Salem               | MO | Silent | 5/85  | 790  | WQSV | Ashland City               | TN       | Silent | 6/94  |
| 1450 | KRBN | Red Lodge           | MT | Silent | 2/94  | 1560 | WBOL | Bolivar                    | TN       | Silent | 5/93  |
| 1480 | KGCX | Sidney              | MT | Silent | 8/93  | 1570 | WNKX | Centerville                | TN       | Silent | 5/93  |
| 1530 | KHAT | Lincoln             | NE | Silent | 5/93  | 1490 | WCSV | Crossville                 | TN       | Silent | 11/92 |
| 1490 | WLGW | Lancaster           | NH | Silent | 10/92 | 1520 | WITM | Elizabethton               | TN       | Silent | 7/92  |
| 1250 | WKBR | Manchester          | NH | Silent | 6/92  | 1220 | WCPH | Etowah                     | TN       | Silent | 7/93  |
| 1050 | WRPT | Peterborough        | NH | Silent | 11/91 | 1130 | WYXE | Gallatin                   | TN       | Silent | 12/91 |
| 1170 | WBRW | Bridgewater Twpsh   | NJ | Silent | 12/90 | 1580 | WHHM | Henderson                  | TN       | Silent | 5/93  |
| 640  | WWJZ | Mount Holly         | NJ | Silent | 7/93  | 1090 | WKCV | Kingsport                  | TN       | Silent | 12/87 |
| 1580 | WSRR | Washington          | NJ | Silent | 1986  | 1430 | WBMG | Knoxville                  | TN       | Silent | 2/88  |
| 1130 | KOKF | Milan               | NM | Silent | 4/93  | 1580 | WDMF | Knoxville                  | TN       | Silent | 5/93  |
| 1340 | KSIL | Silver City         | NM | Silent | 1/94  | 1430 | WINK | Madison                    | TN       | Silent | 8/91  |
| 1290 | KSRC | Socorro             | NM | Silent |       | 1120 | WCGM | Maryville                  | TN       | Silent | 10/93 |
| 1420 | WYUT | Herkimer            | NY | Silent | 6/91  | 1360 | WWHY | Milan                      | TN       | Silent | 3/91  |
| 1160 | WMMV | Mechanicville       | NY | Silent | 5/93  | 1410 | WSTN | Somerville                 | TN       | Silent |       |
| 1070 | WSCP | Sandy Creek Pulaski | NY | Silent | 5/94  | 1040 | WJOR | St. Joseph                 | TN       | Silent | 6/91  |
| 1110 | WTBQ | Warwick             | NY | Silent | 4/94  | 1500 | WTNE | Trenton                    | TN       | Silent | 12/92 |
| 1470 | WVBS | Burgaw              | NC | Silent | 7/93  | 1090 | KFRD | Bellville                  | TX       | Silent | 1/91  |
| 1590 | WHYP | Clayton             | NC | Silent | 6/93  | 1290 | KWGH | Big Lake                   | TX       | Silent |       |
| 1480 | WJHB | Fair Bluff          | NC | Silent | 4/93  | 1270 | KWKI | Big Spring                 | TX       | Silent |       |
| 1000 | WHEV | Garner              | NC | Silent | 3/92  | 1500 | KBRN | Boerne                     | TX       | Silent | 9/93  |
| 1300 | WSSG | Goldsboro           | NC | Silent | 6/92  | 1410 | KLEV | Cleveland                  | TX       | Silent | 2/93  |
| 1550 | WBZQ | Greenville          | NC | Silent | 3/90  | 1530 | KWTR | Creedmore                  | TX       | Silent | 11/92 |
| 1250 | WKDX | Hamlet              | NC | Silent | 10/92 | 1280 | KRAN | Morton                     | TX       | Silent | 7/91  |
| 1000 | WSPF | Hickory             | NC | Silent |       | 1000 | KNDL | Odessa                     | TX       | Silent | 7/91  |
| 1580 | WUIV | Icard Township      | NC | Silent | 1/93  | 1330 | KOYL | Odessa                     | TX       | Silent | 3/91  |
| 870  | WGTL | Kaunapoli           | NC | Silent | 3/93  | 1410 | KNAL | Victoria                   | TX       | Silent | 4/92  |
| 1230 | WQDW | Kinston             | NC | Silent | 6/92  | 1340 | KTMP | Heber City                 | UT       | Silent | 3/91  |
| 1380 | WSFL | New Bern            | NC | Silent | 2/91  | 970  | WHWB | Rutland                    | VT       | Silent |       |
| 1470 | WPNC | Plymouth            | NC | Silent | 5/93  | 900  | WCBX | Bassett                    | VA       | Silent | 7/93  |
| 1340 | WADE | Wadesboro           | NC | Silent | 10/92 | 1470 | WBTX | Broadway                   | VA       | Silent |       |
| 1520 | WARR | Warrenton           | NC | Silent | 3/91  | 1230 | WODI | Brookneal                  | VA       | Silent |       |
| 1560 | WTRQ | Warsaw              | NC | Silent | 11/90 | 1440 | WASE | Herdon                     | VA       | Silent | 1/84  |
| 1240 | WWWC | Wilkesboro          | NC | Silent | 4/93  | 1450 | WCLM | Highland Springs           | VA       | Silent | 5/93  |
| 990  | WBTE | Windsor             | NC | Silent | 3/91  | 1270 | WWES | Hot Springs                | VA       | Silent | 3/91  |
| 1330 | KDRQ | Wishek              | ND | Silent | 10/93 | 1390 | WWOD | Lynchburg                  | VA       | Silent | 12/91 |
| 1540 | WNRJ | Cirleville          | OH | Silent | 2/94  | 1490 | WAYB | Waynesboro                 | VA       | Silent | 1/91  |
| 1570 | WGLX | Galion              | OH | Silent | 3/92  | 630  | KKPL | Opportunity                | WASilent | 09/93  |       |
| 1120 | WYNO | Nelsonville         | OH | Silent | 6/92  | 1340 | KAPA | Raymond                    | WASilent |        |       |
| 1570 | KTAT | Frederick           | OK | Silent | 4/94  | 1400 | KITZ | Silverdale                 | WASilent | 02/94  |       |
| 1590 | KDLB | Henryetta           | OK | Silent | 1/90  | 1010 | WCST | Berkeley Springs           | WVSilent | 6/93   |       |
| 1500 | KXVQ | Pawhuska            | OK | Silent | 12/92 | 1380 | WMTD | Hinton                     | WVSilent | 5/93   |       |
| 1530 | KXTD | Wagoner             | OK | Silent | 3/93  | 650  | KUUY | Orchard Valley             | WVSilent | 2/92   |       |
| 1600 | KEED | Eugene              | OR | Silent | 7/93  | 1240 | KRAL | Rawlins                    | WVSilent | 10/92  |       |
| 1070 | KWSA | West Klamath Falls  | OR | Silent | 5/94  | 1090 | WSOL | San German                 | PR       | Silent | 2/92  |
| 1190 | WMRE | Hughesville         | PA | Silent | 5/94  | 690  | CBWB | Wabowden                   | MBSilent | 10/93  |       |
| 1080 | WQRO | Huntingdon          | PA | Silent | 11/87 | 700  | CKIC | Yellville                  | NS       | Silent | 9/92  |
| 960  | WQLE | Kane                | PA | Silent | 6/93  | 1240 | CJCD | Yellowknife                | NT       | Silent | 9/90  |
| 1590 | WMIM | Mount Carmel        | PA | Silent | 6/93  | 1280 | CKCV | Quebec                     | PQ       | Silent | 1/92  |
| 1320 | WTSS | Scranton            | PA | Silent | 3/93  | 1240 | CKBS | St.-Hyacinthe              | PQ       | Silent | 1/91  |

## Ramsey AM-1 Transmitter Kit

Reviewed by Christopher R. Cuomo

Many of you can remember the mid 1960's when vacuum tube based low-power broadcasting kits by companies such as Lafayette, Radio Shack, and Allied Knight sold like hotcakes, often to kids who wanted to "play radio" and emulate that famous "boss jock" sound of that era. These kits were simple to build, inexpensive, and readily modified in both legal and not so-legal ways and helped launch the careers of many radio announcers and technicians.

John Russell Ghrist (N9HVP), in his excellent Chicagoland radio history, "Valley Voices," details the beginnings of his radio career in 1965 at the age of sixteen with "WCYA", an Allied-Knight transmitter that he and friends operated out of his room for several years. For over twenty years no Part 15 broadcasting device ever seemed to match the following that the kits of the mid '60s had, with the exception, perhaps, of Ronco's "Mr. Microphone" toy. (Hey girls! We'll be back to pick you up at eight!) Ramsey's FM-10 (now replaced by the updated 10-A) and a host of other stereo FM transmitter kits helped to change all that. These kits had all the virtues of their AM predecessors, plus excellent audio quality from the BA1404 IC chip which acts as the heart of most of these kits. With this in mind Ramsey's new AM 1 has some pretty big shoes to fill. Find out below how well it stands up to the challenge.

### Specifications:

|                     |                       |
|---------------------|-----------------------|
| Tuning range:       | 520-1750 kHz          |
| Output power:       | 100 mw stated         |
| Power Requirements: | 9 to 15 VDC at 200 mA |

### Ordering:

The Ramsey AM-1 retails for \$29.95 plus \$4.95 for shipping and handling in the U.S., \$6 shipping and handling to all other countries. Empire State residents add 7% sales tax. Send your order to Ramsey Electronics, 793 Canning Parkway, Victor, NY 14564. A matching plastic case is also available for \$14.95, a lot to ask for a plastic case which will provide no shielding of RF interference to the sensitive oscillator. For about the same price, you can build your own using Radio Shack's \$6.99 Deluxe Metal Utility Cabinet (Catalog no. 270-253A) plus a SPST on/off switch and antenna, audio, and power connectors of your choice. If you have access to a drill press, I suggest building your own case. I built mine in about an hour. One helpful hint for those of you case builders who plan on using a SO-239 connector for your RF output: If you don't have a large enough drill bit to make the hole for the jack, the softness of

the aluminum in the aforementioned Radio Shack enclosure will allow you to drill the hole with the largest bit you have and then use a reamer to enlarge it. When reaming, work in small steps, checking every so often for when the connector will fit in the hole. My kit arrived nine days after ordering. Kudos to Ramsey's customer service, which is top-notch, and I have never waited more than two weeks to receive an order from them.

### Construction:

The twenty-page instruction manual supplied with the kit is also available separately for \$5. It is clearly and concisely written in a light-hearted style to guide a novice-kit builder through the thirty-plus steps in the building of the kit. Basically, if you can solder and can tell a capacitor from a resistor and an inductor from a transistor, you can build this kit with no difficulty. If you will not be using Ramsey's custom case, and instead using a case of your own design, do not install switch S1, and the jacks J1, J2, and J3 unless your case will accommodate these components in the same positions. You may have to connect chassis mount jacks and switches using short jumper leads from the component to the board as I did. A few inches of 50 coaxial cable will work well in connecting the RF output jack you will be using to the board. Twist the shielding into two braids and solder them to any of the three ground connections on the board's slot for J2. Connect the center conductor to the center hole. Do the same with a short length of audio cable to connect to the slot for J1.

The Ramsey AM-1 uses a resonant tuned circuit consisting of two or three capacitors in parallel with a variable inductor. The kit comes with a complete set of capacitors to enable the user to cover any frequency in or adjacent to the expanded AM band (two .0022uF, and one each of the following values: .001uF, 470pF, and 220pF). Selecting a combination of these caps allows tuning a portion of the band. I suggest that you purchase a set of temperature-stable capacitors to replace the dirty ceramics provided. Computer grade, silver-mica, or NPO types will work better and a full set will only cost about a buck or two. At RF frequencies, even a slight change in capacitance can cause your output to drift. Leave the leads on the caps slightly longer than normal in case you decide to change frequencies. This way you'll be able to re-use them. You may be able to tune frequencies much lower and higher than the bands

indicated by using different values and combinations of capacitors. I have heard of one user modifying his to work in the 7.4 MHz band favored by SW pirates, but one must consider whether anyone will be listening to out-of-band frequencies. Tuning up the transmitter is a bit tricky, but the frequency stability is relatively good all things considered using computer grade caps in the oscillator circuit. Use a frequency counter or a digital receiver tuned to your intended operating frequency to monitor your output while you tune 'er up. I really can't agree with Ramsey's claim of "tune it and forget it" so I would check the output every 30 minutes of broadcasting or so, just to be sure. I found the frequency did not drift noticeably after 30 minutes of operation.

The Ramsey AM-1 uses six transistors, all 2N3904s. The '3904 is your basic jack-of-all-trades (and consequently, master-of-none) transistor. They work decent and are inexpensive, especially when you buy them in vast quantities as Ramsey undoubtedly did. One may be able to improve the performance of the AM-1 by replacing some, or all of the supplied transistors with ones more specialized to the tasks they perform. If you're asking, "Is there any way I can raise the power of the AM-1?" (Arr, ye mates, so thois yer game izzit?!), well, short of using an external linear amplifier, this might work. If anyone has a transistor specs book, I'd be interested to hear what you come up with. The TO-92 case transistors supplied have a maximum power rating of around 600 mW, so considering the stated 100 mW output, you do not have to worry about burning them up if your SWR is too high, which it likely will be if you follow FCC Part 15 regulations and only use a 10 foot "long" wire as an antenna. This is something else to consider for all you power-hungry pirates out there. The output impedance of the AM-1 appears to be 50. Using a fifty foot long wire strung out on the roof of my house, I was able to cover several blocks. Ideally, the antenna should be like licensed stations use; i.e., sticking straight up in the air and not parallel with the face of the earth. Please let me know about any experimental antennas you try out. The AM-1 manual provides sketchy details on making a loading coil for the antenna but doesn't give any formulas, one of the manual's few flaws.

Early versions of the AM-1 were built to be powered by a nine-volt battery and included a snap-on connector and battery clip. In the current revision, Ramsey suggests that you use a 12 volt power supply or a battery pack made up of eight 1.5 volt cells, presumably C or D cells. (Keep in mind that rechargeable nicads have an output of 1.25 volts typically so you might have to use nine or ten of them in

series, a rather expensive proposition.) The coaxial type power connector supplied mates with the typical plug found on inexpensive wall adapters. These work well and are very inexpensive. I found one for sale at a flea market for \$2.50. If you decide to use one, keep the following in mind. Look for one with an output of 12 to 15 volts DC at a current of at least 300 milliamps. There are a lot of 12 volt AC adapters out there that look similar at first glance. Also check pin polarity. The AM-1 is designed for inner connector positive, outer ring negative. If your supply has the opposite type of plug, you can simply cut the plug off, leaving about two inches of wire or so, turn it around and solder on a new plug or reverse the leads on the old one and connect it back. Make sure all solder connections are insulated with PVC tape or shrink tubing. Your wall adapter is probably unregulated. If so, you must make the following quick and easy modification to the AM-1. You will need a 7812 voltage regulator IC, available at Radio Shack for \$1.19, part number 276-1771. From the front of the chip (with the printing facing you), pin one (input) is on the left, pin two (output) is on the right, and pin three (ground) is in the center. Connect the power supply jack to pin one and the positive wire to pin two. Pin three goes to any ground point on the board. I put pins two and three of my 7812 in the slots designed for use with the power jack supplied with the kit and bent pin one up on an angle, away from the board and chassis and connected the positive lead to it. See the illustrations below for details. Of course if you are using Ramsey's custom case you will not be able to put the IC inside, one more thing to consider when choosing a case for your transmitter. Operating without the IC will cause a loud 60 cycle buzz in your transmission, that same electrical noise DX'ers dread in their receivers. Installation of the 7812 should clear this up. If there is still a buzz in your audio, try replacing C15, the 220F electrolytic with one a 1000F or higher, keeping in mind the size limitations of your case. Actually, the higher the capacitance the better, although there is a point of diminishing returns. Get one with a voltage rating of at least 15 VDC and observe polarity! I have seen 2200F 25 VDC caps small enough that they might fit the Ramsey custom case. You might also put a small value RF choke in the positive lead. I used a moulded 3.3 H in mine, though the Shack's wound 100 H coil might work better, if you can get it to fit inside. If this doesn't help, check your power supply. With a multimeter, which any kit builder should have, measure the output, it should be between 12 and 15 volts DC. Now measure it on the AC volts setting. You should get a reading near zero. Anything else tells you

your supply is defective. If the supply is in working order, try moving the transmitter to another area. RF interference emitted by motors, televisions, and the AC lines themselves can find its way into the transmitter, especially if it is in an unshielded plastic housing, and be amplified along with your output. The modifications specified above are a good idea regardless of what power supply you are using.

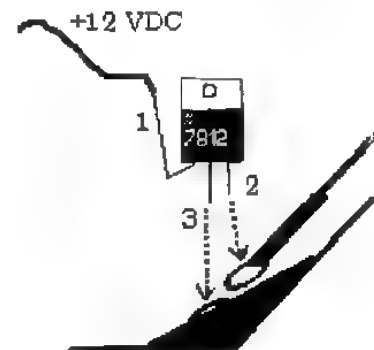
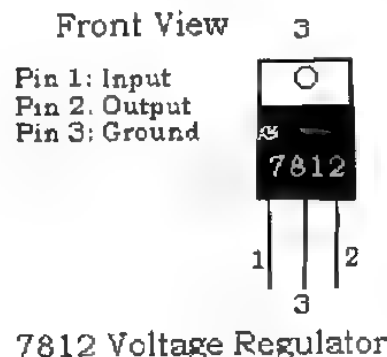


Figure 1: 7812 Layout

Figure 2: Installation of the IC into the slot intended for J3

Audio quality of the AM-1 is very good. Adjusting R12, the level adjustment potentiometer, is a bit touchy. Basically, set it to a point where the AM-1 sounds on a nearby radio as 'loud' other local stations.

Be advised that the Ramsey is lacking in harmonic filtering. I was testing on 1620 kHz and monitoring the twentieth harmonic on 32.4 MHz. If you are operating yours at the low end of the band you could be interfering with a local station on a multiple of your frequency. For example, if you are operating on 540 kHz, you will generate harmonics on 1080 and 1620 kHz. I am working on a harmonic filter for the AM-1. If you have any ideas let me know

**Summary:** Whether or not you purchase the AM-1 should hinge upon one factor: how you intend on using it. If you have no tools and/or no desire to experiment and modify your kit or just want to play deejay, then save the extra five dollars and buy the FM-10A. You'll be pleased with the audio and coverage and more likely to find listeners with a quality stereo signal. The AM-1 is a good kit and meets all expectations, and ideal for the novice or experienced kit builder and I heartily recommend it to any kit builder interested in experimenting with the design. There are a wide variety of modifications you might want to experiment with, not just raising the power, but audio and antenna experiments as well. How about QRP use, or use as a 'medfer' CW beacon or as a TIS? Whatever experiments you do with the AM-1, tell me about them at the address given below or in Musings. I'm sure a lot of DX'ers would like to know about them. If you're still undecided about buying, I will have my assembled AM-1 at this year's NRC convention in Nashua for you to see and hear it first hand. If you have any questions send a SASE to Christopher Cuomo, 670 Third Avenue, Verona, PA, 15147-1349.

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## Drake R8: Increased Dynamic Range, Mod. 2 ... by Dallas Lankford

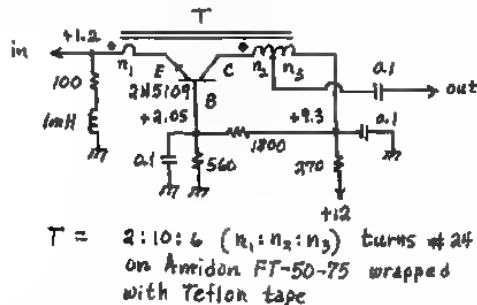
In my *EX News* 60, No. 27 - June 28, 1993 article, "Drake R8: Increased dynamic range," I described a simple method of increasing the dynamic range of the R8. Subsequently, I discovered that the improvement I reported may not be so dramatic for some R8's when I bought another R8 RF PC board to have on hand for "before-after" comparisons. This new (unmodified) RF board had substantially better 3rd order intercepts than my original RF board before I modified it, namely about +2 dBm with preamp on, and +10 dBm with preamp off. To satisfy my curiosity, I restored my modified RF board to original, but with a new SBL-3 mixer and new J310 FET, and measured the intercepts. They were about +2 dBm and +10 dBm respectively for preamp on and off, about the same as for the newly arrived RF board. Apparently the SBL-3 mixer or J310 FET or both were defective in my original R8. Consequently, I recommend against doing that mod because the improvement in dynamic range over an unmodified R8 does not justify the effort, assuming that your R8 is not defective, as mine apparently was originally.

The simplest way to improve the R8 out-of-band dynamic range is to use a low-gain tuned preselector. I have not tried this approach myself, but I have been told by several R8 owners that it is a simple and effective solution for the R8 dynamic range problems. What preselector should you use? Again, I have no first hand experience with tuned preamps. The MFJ-1020A indoor active antenna might be suitable; it has been rated a excellent when used as a preselector in some reviews, though poor as an active antenna. It tunes 0.3 - 30 MHz in 5 bands (the MW band is split into 0.3 - 0.7 and 0.7 - 1.6 MHz), and sells for \$79.95. MEJ also sells a MFJ-956 SW/MW/LW preselector/tuner for \$39.95 which might be suitable. It is apparently passive (no amp), and tunes 0.15 - 30 MHz in 4 bands.

A tuned preselector improves dynamic range by reducing the signal levels of the offending stations. Thus, the preselector approach is effective against signals 100 KHz or so away from the desired signal in the MW band, and several 100 KHz away from the desired signal in the SW band. A preselector is not effective against nearby signals, and does not improve the close-in dynamic range.

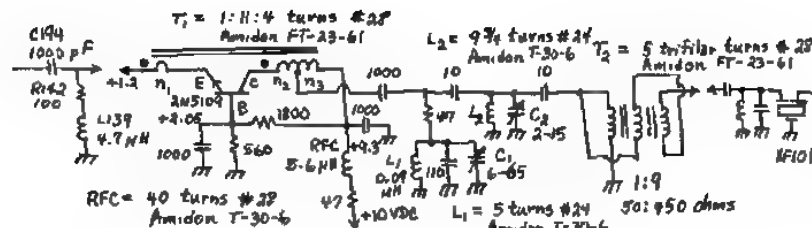
Despite the disappointment of my first effort, I have remained interested in substantially improving the R8 dynamic range. The Minicircuits data book suggests that the SBL-3 mixer should be capable of considerably higher 3rd order intercept than the R8 achieved, namely about +18 dBm (with preamp off). The amount of improvement with preamp on depends on preamp gain and other factors.

My second attempt at improving the R8 dynamic range began with the preamp. After extensive measurements, I had concluded that the R8 preamp had too much gain, and it was too noisy. The original RF preamp was removed and replaced with so-called noiseless (transformer feedback) amplifier set up for 9.5 dB gain. A schematic of this preamp is given below.



Measured preamp-on sensitivity in the 6 KHz SW, AM mode, 400 KHz modulated 50%, with the shield described in my article (same *EX News* above). "Drake R8: Type B spurs elimination," was 0.33 microvolts for a 10 dB S+N/N at 1.8 MHz. Without the shield, preamp-on sensitivity was 0.55 microvolts.

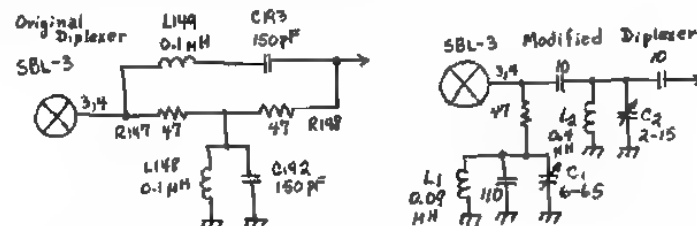
Next, the J310 1st 45 MHz IF amp was replaced with a noiseless (transformer) feedback amp set up for 12 dB gain, followed by a diplexer, followed by a 9:1 broadband step-up transformer (the 1st 45 MHz IF transformer was removed). A schematic of this mod is given below.



The exact circuit of the 45 MHz crystal filter (XF101 and preceding parts) is unknown. The parts on both of my RF boards do not agree with the R8 service manual schematic. I was told by a Drake engineer that the input impedance of the crystal filter is 500 ohms real, so I used a 1:9 step up transformer, which is a reasonably good match. I also used C194, R142, and L139 from the original R8 1st 45 MHz IF amp to save space. RFC is probably not necessary because there is already good decoupling of the +10 VDC line on the R8 PC board at the 1st 45 MHz IF amp, but I wanted to be sure that I had the 2N5109 feedback amp well isolated from the DC line.

The 3rd order input intercept, ICP3, of the original 1st 45 MHz IF amp (tones injected at P104) was +18 dBm. The ICP3 of the above modified 1st 45 MHz IF amp was +29.5 dBm. External stand-alone measurements of a push-pull version of this amp have shown that it is capable of +40.5 dBm ICP3 when it is terminated properly, so perhaps some further improvement is possible for the ICP3 of the 1st 45 MHz IF amp.

The last step in the modification was to replace the R8 diplexer following the SBL-3 1st mixer. The original diplexer is given below on the left, and the new diplexer is given below on the right.



Several types of diplexers were tried following the 1st mixer. The one above, derived from a 9 MHz diplexer in Fig. 11 of Chapter 6 of *Solid State Design* by W. Hayward and D. DeMaw, gave higher ICP3 and was easier to tune than the others. Practically everyone agrees that the 2nd harmonic termination (L1, L10 pF, C1) should have a high C/L ratio, and that the ratio should be about what I used. However, there does not seem to be general agreement on how to implement the signal path part of the diplexer. So perhaps further improvement is possible in this part.

All tuned circuits of the diplexers should be tuned to resonance. This is easy to do for the signal path part (L2, C2) because there is a very pronounced peak in signal level when C2 is adjusted (with a CW signal generator connected to the R8 antenna input terminal). A word of caution is in order concerning the signal path tuned circuit, L2, C2. The inductor L2 is about 0.4 microhenrys, which is tuned to resonance at 45 MHz with about 30 pF of capacitance. Due to the nature of the capacitive coupled circuit, the coupling capacitors are added to C2; they are part of the resonating capacitance. When distributed capacitance of L2 is included together with stray capacitance, very little additional capacitance is needed to tune the circuit to resonance. With the turns spaced evenly around the toroid (L2), resonance was obtained with about 5 or 6 pF from C2. The point is that there may be enough variation in T-30-6 toroids to require addition or subtraction of a turn to or from L2.

Final adjustment of the diplexers may be done with a two tone IMD measurement system with two tones of about -10 dBm spaced about 40 KHz apart in the 1.6



to 2.0 MHz range. However, a high dynamic range IMD measurement system is required for this approach. A better approach is to adjust C2 of the mixer diplexer for minimum intermodulation distortion on some HW band distortion product in the 1.8 to 2.0 MHz range with the preamp turned on. With this approach, and the BS in CW mode, on a quiet morning, the IMD3 on 1.85 MHz due to KRUS and KWKH (2x1.49 - 1.13) can be completely eliminated. Other IMD3 which I used to hear at night (from many sources) are now completely gone from the 1.8 - 2.0 MHz range.

With the duplexers adjusted as described above, and tones spaced about 40 KHz apart in the 1.6 to 2.0 MHz range, preamp-off ICP3 was about +20 dBm, and preamp-on ICP3 was about +10 dBm. These ICP3 values held up to about 10 MHz, and then begin to fall off slowly to about +13 dBm preamp-off and about +6 dBm preamp-on at 15 MHz. For comparison, using my unmodified RF PC board, I got +12 dBm preamp-off and -2 dBm preamp-on ICP3 at 15 MHz. While making these measurements, I observed that there was considerable variation in ICP3 between the 2xf1 - f2 and 2xf2 - f1 IMD3, so I took the worst of the two ICP3's for the values above.

The above mods also improve the 2nd order performance of an RB. For example, the preamp off ICP2 of a stock RB is about +40 dBm at 510 KHz for tones at 980 and 1490 KHz. The corresponding ICP2 of a modified RB is about +53 dBm, which is about what an SBL-3 mixer is capable of when properly terminated according to MiniCircuits data. The preamp-on ICP2 of a modified RB at 510 KHz due to 980 and 1490 KHz tones is about +43 dBm.

Although these mods have made the R8 3rd order intercepts with preamp-on about as good as an unmodified R8 with preamp-off below about 10 MHz, I have changed my mind about rewiring the R8 to leave the preamp permanently on, as described in my previous article. A better solution, which I have not done yet, is to install an on-off switch on the rear panel so that the preamp can be switched between always-on and R8-original. This should be implemented so that the switch can be unplugged from the RF PC board to facilitate easy removal of the PC board. The best solution, of course, would be for Drake to change the software so that the preamp can be enabled below 1.8 MHz.

As much as 6 dB additional increase in the 1st mixer 3rd order intercept might be possible with square wave local oscillator drive as suggested by technical correspondence, page 63, QST, October 1988. However, the feasibility of changing the BB 1st LO to square wave drive has not been established. A push-pull 1st 45 MHz IF amp would probably be required in this case.

## Addendum II VI 94

The discussions above were written on 3 III 94 and revised on 8 III 94. At about the same time, the work described in the following addendums was begun. At first, the subjects of increasing R8 dynamic range and increasing R8 50 KHz IF image rejection seemed unrelated, and I hesitated to include the two topics together in a single article. But as you will understand by the end of this article, the two apparently different topics are related because the R8 50 KHz IF image rejection mod continued to evolve, and finally interfaced with the R8 increased dynamic range mod 2. I do not know whether a variation of the 50 KHz IF image rejection mod will work stand-alone, i.e., without modifying the 1st 45 MHz IF amp. The original R8 1st 45 MHz IF amp has a higher impedance load (the tuned LC circuit for the J-310 FET), and higher impedance circuits are more prone to RF leakage than lower impedance circuits. My best guess is that the 50 KHz IF image rejection mod would not be as effective if used with the original R8 1st 45 MHz IF amp.

## Addendum, 13 III 94

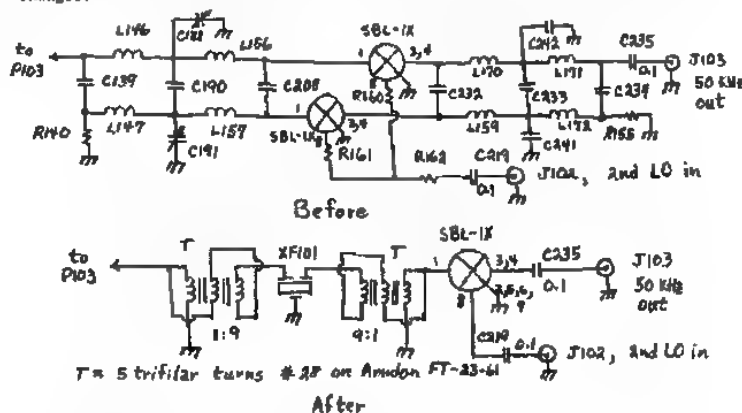
After completing the mods described above, I turned my attention to one of the remaining R8 defects, inadequate image rejection. Several W8 reviewers have rated the typically 80 dB image rejection of the R8 (for the 50 KHz IF) as excellent, but that really is not the case at lower frequencies where there are exceptionally strong signals (in the MW band, and in some of the lower SW bands). A really outstanding receiver, like the R-390A or NRD-525, has 100 dB image rejection in the MW band, and the image rejection tends to fall off slowly as frequency increases. For example, the 455 KHz image rejection of my NRD-525 is about 100 dB for the 580 KHz image of 1490 KHz, about 90 dB for the 1090 KHz image of 2000 KHz, about 86 dB for the 9.090 MHz image of 10.090 MHz, and about 74 dB for the 19.090 MHz image of 20.090 MHz. For my R-390A, the 455 KHz image rejection is in excess of 100 dB at all frequencies, the variable 17.5 - 25 MHz IF image rejection is in excess of 100 dB at all frequencies for which it is used (0.5-8.0 MHz tuning range), and the 2-3 MHz variable IF image rejection varies from 90 dB at 10 MHz to 76 dB at 20 MHz.

The obvious solution for the inadequate X8 image rejection is to add additional filtering in the 45 MHz 1st IF signal path. But I had tried that before, without success. Eventually it dawned on me to do what I have done before to test for signal leakage when implementing filter mode, break the signal path. And I got lucky and broke the signal path at C176 and C175 (by removing them); with the path broken at this point, the signal was down a mere 40 dB. The indication was that the input circuit of the image reject circuit was acting as an antenna. To test that hypothesis, I removed the input part of the image reject circuit R140, L146, C139, L147, C188, C190, C191, L136, L157, and C208; see the schematic below. With these parts removed, the signal was down in excess of 100 dB. My initial inclination was to rebuild the image reject input circuit in a small RF tight box and reinstall it. Before I started on that project, I decided to remove the remaining parts to the image reject circuit just to see how bad the bare-bones image rejection really was. So I took out R160, R.61, R162, C232, L159, L170, C242, C233, C241, L171, L172, C234, and L155, and installed jumpers to enable one of the SBL-IX 2nd mixers.

You can imagine my surprise when the image rejection improved with the image reject circuit removed, to about 90 dB.

Next, I fabricated a small PC board adapter with two impedance matching transformers and one XF101 45 MHz crystal filter and installed the adapter in some convenient holes formerly occupied by the image reject input circuit. The image rejection went up to just a tad over 100 dB. The completed mod is shown below.

At first I mistakenly concluded that the image reject circuit of the R8 did not work. To test this hypothesis, I removed the image reject circuit from an otherwise unmodified R8 RF PC board which had 80 dB image rejection before removing the image reject circuit. After the circuit was removed, the image rejection dropped to 54 dB. My present hypothesis is that the changes I made to the 1st mixer diplexer and 1st 45 MHz IF amplifier, as described above, are responsible for the improved 59 KHz image rejection. To test this hypothesis, I will need to implement those changes on this second RF PC board. Unfortunately, at present I am without some of the parts need to do those changes.



Unintentionally, two crucial aspects of the image reject mod were omitted from the discussion. I had rewound 1125 (the last 45 MHz IF transformer) with 9 3/4 turns #24 close spaced at the bottom (when mounted on the PC board) of the T-30 10(I think) toroid, and I had replaced C174 by a 6-60 pF ceramic trimmer (Mouser 24AA024, modified by trimming off parts of the mounting lugs and reworking the trimmed lugs with an India stone so that the lugs would fit properly in the PC board holes). I discovered these omissions while modifying the "new" PC board. The C174 change is probably not necessary, but the Mouser 24AA024 trimmers seem like higher quality trimmers than those used in the RS. When mounting the trimmer, be sure to mount the "ground" lug in the "ground" PC board hole. Drake production line workers did not seem to pay much attention to details like this; the original C174 was mounted incorrectly.

With the IF amp change, but L128 unchanged, image rejection was improved from about 54 dB to about 66 dB. After L128 was changed as described above, image rejection improved to 80 dB.

The "new" RF PC board I received from Drake was missing the small shield which covers the bottom of the crystal filter XF-101/XF-100. I don't know if this is a production change, or if I was shipped an incomplete RF board. In any case, omission of the shield degrades potential image rejection. I fabricated a similar shield out of copper plate and installed it under tension, without soldering it in place. The image rejection improved to 86 dB.

All of the above image rejection values are without the crystal filter installed at the input to the SBL 1X 2nd mixer. With the additional crystal filter, image rejection was about 100 dB, maybe a tad less.

It would appear that the primary cause of poor R8 image rejection is due to radiation from the high Q inductors of the 45 MHz IF transformers L140 and L128. My mod eliminated L140 altogether. Examination of the PC board in the vicinity of L128 suggests that extending the ground plane under the shield, and using a solid shield (no hole in the top) might improve image rejection further. Also, surrounding the input and output traces of the crystal filter XF-101/XF-100 with ground plane might improve image rejection further, and a more complete shield across the bottom of the filter might also help. This evening I have been eyeing L138, the inductor of the 2nd 45 MHz IF transformer and wondering if ravidning it might further increase image rejection.

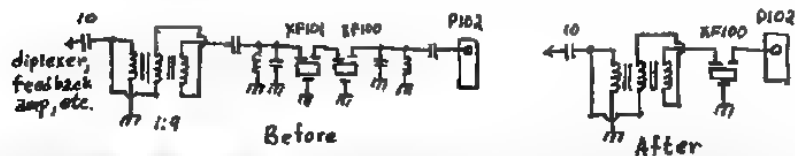
L128 does not actually have to be rewound because it comes with 11 3/4 turns #24, spaced evenly around the entire toroid. You merely remove two turns, adjust the spacing to close-spaced, trim and re-tin the winding ends, and reinstall it.

All of the circuits above were fabricated on small PC adapter boards and mounted as close to the R8 PC board as possible. The ground lead and high impedance lead of T2 of the 2N5109 IF amp were mounted on the R8 PC board in existing holes for L140, and the low impedance lead was connected to the nearby adapter board. No special shielding or layout was used for the crystal filter (T/XF-101/T) at the input to the 2nd mixer SBL-1X, though the input transformer, crystal filter, and output transformer were laid out in a straight line, and very short traces and adapter leads were used.

I don't know if you can buy a single XF101 filter from Drake. When I inquired about the filter, I was told only that a crystal filter set, consisting of a matched pair of 45 MHz filters and a 10.245 MHz filter (for FM) could be purchased. The price last year was about \$23. You should inquire about current price and availability.

#### Addendum 2 VI 94

After further experiments with the R8 image rejection, and further thought about the nature of the problem, I have decided that the best way to proceed is to remove the undocumented surface mount components associated with the two-filter 45 MHz crystal filter, remove one of the filters, and use the removed filter at the input to the 2nd mixer (after removing the image reject circuit as described above). With this approach, the image rejection is about 100 dB, which is about as good as can be achieved with any of the approaches I tried. This approach obviates buying another 45 MHz filter from Drake. The original two-filter 45 MHz crystal filter circuit in an unmodified R8 simply seems like a bad idea to me because the amount of image rejection from that circuit depends on the geometry of the PC board layout and the geometry of the IF transformer windings, which in turn determines the amount of phase cancellation, and thus the amount of image rejection. If my analysis of the situation is correct, it is a very unsatisfactory situation, and there is no need for two filters where they were used. My present modification to the original 45 MHz crystal filter is shown below.



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## Radio Roundup

Pete Kemp (KZ1Z) [PeteKZ1Z@AOL.com](mailto:PeteKZ1Z@AOL.com)

P. O. Box 73

Bethel, CT 06801-0073

News of the radio industry, of interest to DXers

Greetings all ... KVEI, Austin, Texas, has a news sports-talk show in the 5 to 7 slot weekdays. Sports Day will be hosted by Jeff Ward ... Former KLOS DJ Damien has signed on for overnight chores on Unistar's Adult Rock and Roll Network ... KIKK Houston's Barry Michaels has signed on as ABC/SMN's Hot AC morning personality ... Some Urban stations are beginning to drop Gangster Rap from their play lists ... The Armed Forces Radio Network has finally agreed to carry a one hour version of Rush Limbaugh on their network ... The Voice of America is selling its 100,000 watt relay station complex in Belize. The 240-acre site called Point Orange will go off line by the end of March ... Amy Warner is now doing overnights on WTPA in Harrisburg ... "In Focus" hosted by David Kelly and Ray Newman has begun on the Sun Radio Network, Sundays 3-4 pm (ET) ... Trivia Addicts take Note: WLS began its Top 40 Format on May 2, 1960 ... CFRB-1010 has launched a Daily Fax Newspaper for its listeners and key people in the media ... The Youth Network has had a name change to the 12-24 Radio Network ... After years of evaluation, court suits and foot dragging, the FCC has finally announced that C QUAM is the standard for AM Stereo ... The Radio Advertising Bureau (RAB) has announced that radio advertising revenues for the third quarter of '93 were up over 7 percent over the third quarter of 1992 ... the Top Five AMers in the latest St. Louis ratings are KMOX-1120, WRTH-1430, KXOK-630, KATZ-1600 and WIBV-1260 ... Speaking of WIBV, they're now carrying the G. Gordon Liddy show in the St. Louis area ... KSD-550 has signed on with the USA Radio Network for overnight talk, the third area station to do so (WBGZ-1570 and WGNL-920 are the others). Jim White celebrates 25 years with KMOX-1120 in 1994, he's a licensed Ham as WQNB ... KFuo 850/99.1 has purchased KSLH-91.5, with the plan for 91.5 to simulcast the 850 spot, and go 24 hours with KFuo-850's Lutheran oriented Christian format (the AM still has to sign off at KOA LSS). KFuo will celebrate its 70th Anniversary in 1994, having gone on the air in 1924 sharing time with KSD on 550, then moving to 850 in 1948. The Lutheran Church-Missouri Synod will own the two oldest FM stations in the market, KFuo-FM has been on since 1948, KSLH first signed on in 1950. KFNS-590 is back in Stereo, after two weeks in mono. The deal is that KSD-550, KFNS-590 and WESL-1490 set aside a week or two per year for maintenance of their C-QUAM exciters (KSD and KFNS set aside their time in December, while WESL sets aside maintenance time in June or July); so for a week or two a year, these stations are in mono. The New Life Evangelistic Center, who owns TV stations in St. Louis and Columbia/Jefferson City and an FM station in Eureka Springs, AR, has purchased KMRF-1510 Marshfield, MO, and has gone to a religious format. The St. Louis based religious group, headed

by Rev. Larry Rice, is known for using its broadcast facilities as training grounds for once-homeless people to learn a host of broadcast skills. This courtesy of the New Life Zoa Free Paper ... Congratulations to all of those AM stations who have performed valuable public service support with the weather-related problems all across the country. WLAD-800 even had a spot featuring morning man Pete Summers inviting listeners who had tuned in for all the snow/cold weather cancellations to stay tuned to the station in the future ... The soon to be divorced Curtis and Lisa Silwa, recently axed in the morning WABC-770 slot, have managed to stay on their feet. Lisa has signed on with WQHT-FM for a 9 to 10 a.m. Sunday Show. Curtis is rumored to be heading for New York City's Municipal Station WNYC. His projected move has been fueled negatively in the Big Apple Media. The new mayor has already stated that he wants the city out of the radio-tv business. WNYC staffers don't want Curtis, as he doesn't fit the station's "highbrow" image, and they view this as just political patronage ... Westwood One is now the official owner of Unistar Radio Networks. This very interesting in light of the fact that Westwood has just reported a net loss of \$29.9 million dollars for its last year ... Just when parents think that they are about all Barney-ed out, Bedtime With Barney hits the airwaves on Sunday evenings via MJI Broadcasting as the syndicator. That's right, Barney is about to read original and class children's bedtime stories to its younger audience members ... WMMM has moved its studios to 1 Lois Street, Norwalk, CT 06850, from neighboring Westport ... Christine Sullivan is the new morning co-host/news anchor on WSNY in Columbus, Ohio ... WCBS news anchor Lon Landis is moving west to ply his craft on sister station KCBS ... WTOP in our nation's capitol is celebrating its 25th anniversary as an All-News station ... The National Broadcasters Hall of Fame is moving its headquarters from New Jersey to Los Angeles ... The FCC has issued a Notice of Inquiry (NOI) concerning rules changes in the area of performance and maintenance of AM directional antenna systems, Docket 93-177 ... IMUS in the Morning is gaining more markets. He has just been added to KHTK, in Sacramento, and WARK/WARK in Hagerstown ... Jo Meader, formerly known as the Rock and Roll Madame while at WXRK-FM in the Big Apple, is returning to the airwaves, this time co-hosting a one hour show on WABC, with Dr. Wally, discussing home repairs. What a switch!

If you would like to contribute to this column, I may be reached at the address above, via CompuServe 72376,2557, Prodigy PFVKS2D, InterNet PeteKZ1Z@AOL.COM, the FIDO system in the Shortwave, Ham or Broadcasting echo areas, The Oracle 1141/1050, or amateur radio packet, KZ1Z @ KIUOL.CT So much for now.

# Musings

## of the Members

**Dave Schmidt**  
P. O. Box 11502  
Wilmington, DE 19850-1502

*Times are local per Muse; submit double-spaced only.*

*Thoughts from NRC members ... the opinions expressed in this column are those of the individual writer and do not necessarily reflect those of the editors, publishers, or the National Radio Club, Inc.*

At the suggestion of PLS, we wanted to put a short blurb in at the start of the column this month. We very deeply appreciate the continued support of the column by all, and very much like having input from all. If you read the small print above, it requests that items are double spaced, which is done 99% of the time, it makes it so much easier for me to transfer the info to the column. If you hand write your report, that is also fine, but please leave a line between your lines. DX related matter should be the highlight, but general radio items, such as data on receivers, techniques for listening, helping ID stations, changes, etc. are very much welcome! That little bit on your part makes a real big difference on getting the column out on time and help keep your editor happy! And now on with the show:

NEAL A. PERDUE - 402 1 SLAUGHTER ROAD - MADISON, AL 35758 2038

----- Greetings to all after a lengthy absence of 11 YEARS! I've DXed about every band there is since 1969, was quite active in BCH DXing and a NRC member from 1981-83. At that time, I was lucky enough to live on a rural mountain-top and used a Hallicrafters SX100 with an SM2 & wedge loop. That's history. I'm now using a Superadio III barefoot and a Panasonic RF2900 loosely coupled to a 100 Ft. wire, the latter being used mostly to check frequency readout on the III. The GE has heterodyne whistles at about 910 & 1360 khz. If the IF frequency is 455, that would be very close to 2 & 3 times the IF. Is this problem common in this receiver? I recently counted my stations heard and came up with about 700. That included about 20 call-changes and that figure would grow quite a bit as there have been a zillion such changes since 83. I admire those who are willing to give all it takes to verify stations by the thousands but I don't have the patience or money required to do that. If I know I heard 'em, that's good enough for me! I'm honest with myself about it. My work schedule does not permit sunset DXing, & I miss that. My listening hours are restricted to about 9PM till 3AM local time. I've always felt pretty lost when DXers MUSE and list their new catches by frequency and call letters only. That's meaningless to me because I haven't been in the hobby long enough to memorize the locations of the stations, so my reports will include that info plus at least the state for readers who feel as I do about it. I'll get on to my new catches: WDAF-610 (MC), WMLD-1160 (GA), WBNS-1460 (OH) & right here in Madison, WBBT-730 with CNN news 24 hours a day, 7 days a week. New calls heard are WYFN-980-TN, WODZ-680-TN, KROW 860 KS, WKOK-1280-TN, & KBIS-1010 AR. A log of possibly KEDA 1540 TX in Sept. will have to remain tentative as KXEL killed them with announcements & ID on the hour. I'll try to check in each month if anything new is heard. All for now! (And a welcome back to you, Neal, glad to have you 'home' with the NRC. Neal was an active DDXD name while I had the column in the 80's, and we hope it will become a regular here! DWS)

BRUCE REYNOLDS - 917 GOODWIN AVENUE - SAN JOSE, CA 95128

----- I am just back from a week's trip to Guam via HI for a conference. Guam is truly a DXers paradise with on 3 local stations and 7 from neighboring Saipan audible in the daytime. At night, the Japanese stations are particularly strong and numerous, but also many Aussie stations were in well, especially around sunset before the Japanese signals gained strength. Among those noted were: 2BL-702, 2NR-738, 3LO-774 & 4RK-837. 2BL was the strongest and most consistent of the lot, I got a good tape of them. Among the locals, KGUM-567 has talk, both local & satellite, including the ubiquitous Rush twice daily (there is no escape, even in the Pacific Islands!) & CBS news on the hour. KUAM-612 has a lot of Chamorro (local language) programming & music, with some CW & other varieties added. KTWS 801 & KSAI 936 feature Christian music & religion, although the latter seems to do more the way of local informational programming. KCMN-1053 is mostly CW ('Coco-nut Country') with some island style music, too. Their signal is rather weak on Guam. In HI, KULA-1460 is silent and its sale is under negotiation. KOHO-1170 is also silent. The new KJPN-940 has a rather limited schedule (in Japanese). Sign on is 6AM local time and they were noted off by around 8PM. Sign offs noted were KAHU-1060 at 10PM & KIAM-870 at midnight to return at 5AM. KHNR-650 has CNN Headline news, while the newly moved KHVH-830 has a news/talk format. The station they changed frequencies with, KIKI 990, is playing oldies. With KDEO gone, KHLO 850 seems to be the lone CW station in the islands. My impression was that there is more HI music on the air now than when I lived in Honolulu 10 years ago, particularly on the neighbor island stations. Back in the Bay Area, as of 6/29, KKHI is still occupying 1550 & KMBF-1540 is still silent. 73

JOHN R. MALICKY - 995 SHADYCREST ROAD - PITTSBURGH, PA 15216-3046

----- In the past week & a half, KDKA-1020 made local news. 1st, on 6/17, a historical landmark was placed in Wilkensburg Commons, near the sight of the original station set-up in the E Pittsburgh Westinghouse pland and was broadcast in the afternoon, though nothing appeared on KDKA TV news or the next days paper. Then today, 6/28, both the AM & TV reported the tearing down of the main 720' tower (built in 1939) at the Allison Park transmitter site, to be replaced by a new & better one in 3 weeks. There was, of course, much hoopla & partying by former & current staff members. This occurred at 3:49PM during the Pirates-Cubs ball game, though the game was not interrupted unless it happened quickly and I missed it. Naturally, what they don't mention is that the station has a back-up tower to stay on the air! And I thought only NRCers got excited when a tower falls! Now, a thank you to ERC for asking (#21 2/28) who we might address reports to at a station in the hope of getting a better response. Over the past years on my many visits (somewhere around 250-300 stations), I've seen its best to start with the engineer, as very close to all know about the hobby. Many of the smaller ones only have a contract engineer. Your letter may end up going "where no letter has ever gone before", in the doghouse probably. Upon a visit, if I am not asking to meet a particular person, whoever I meet, I'll have to go into my "song & dance" routine about the club & hobby at which time, a pleasant visit occurs. So, a rule of thumb, if you don't have a name to address your letter, whether from VERIE SIGNERS or the DJ's name you've heard on the air, send it to the PD or GM (those not in larger cities) and explain your reasons for writing, while, only more in brief, to engineers in larger markets remembering to try to enclose our "Guide to DX". Whoever you send a letter to, ask the person to forward your letter to someone if they do not have the time to personally answer. There are all kinds of angles, a sales pitch commenting on their ads, or their thorough coverage of local news, ball games, music programs (satellite or local), etc. Many times on a visit, it's easy when someone understands DX, very trying or exciting when trying to explain it, very rewarding when the personnel receive me well, a small letdown when they don't (though rare when that happens!). When it happens, my meeting with the station president at smaller stations is received very highly, so there's a possibility of addressing a letter, also. At any visit, I always leave some DX NEWS copies, a Guide to DX, play a tape of my reception of them (that usually gets them going) & generally offer a postcard of Pittsburgh for their efforts & interest. CHRIS CUOMO knows my routine well, but sometimes wishes he didn't! Of course, chances are if a station is on past their sign-off or on day pattern while at night (never happens!-DWS), you can guess your request will be dismissed. Again, good luck & keep trying. A kind letter & return postage is just about a must. Finally, at a local 5K race back on 5/8, while chatting with good friend & NRCer DAN EMERICK on the greatness of DX & the NRC, to our surprise another runner passed by, heard us & replied, "CQ, CQ?". A native tongue to our foreign language! 73s'

WILLIAM LOYD VAN HORN - P O BOX 176 - BRASSTOWN, NC 28902

----- Well, I'm back for another adventure of DX from the busiest town of them all, Brasstown! Haven't had a lot of time lately to do much DX. However, getting out of school for 3 months is helping. A couple of nights ago brought my 1st Columbian, HJCY-810, not reported but did tape it. Have finally heard all the new Cincinnati stations, and some other new call changes. Felt kind of funny to have a new Cincinnati station of 1530! Sending some reports out to those stations, and a few others. A call to WYXI has produced that my report was not bad, just lost in a pile of mail. Should be getting some responses in the next week or so. Lately, WSB-750 GA has been virtually non-existent, instead 3 or 4 other stations (all UNID of course) have been knocking them out. I'm beginning that LONG process or saving for a radio, the new Drake SW8, then a KIWA loop to go with it. I can hardly wait. More next time in my 'Brasstown DX Adventure', 73's Still no NJ!!!!

G. HARLEY DELPURERE - P O BOX 10 - HENDRICKS, WV 26271-0010

----- In yesterdays mail I received the 6/23 DX NEWS and it reminded me that I've not sent a MUSING in a long time! Of course, I want to thank you for the veries from WHIZ, WCEI & WNRK, they're unique! And now for some help, please: Is the 1520 station in Toledo, OH considered to be WJCM even though there is a WJCM in Sebring, FL? Yes, I have read in a past DX NEWS of the mix-up. In other words, is the Toledo 'WJCM' still WVOI? Also, does anyone have any info on obtaining veries from WBBR-1130 or WQEW-1550? Both are needed here. Thank you & do have a good summer!

HERMIT GEARY - 1266 RIVERVIEW DRIVE - WALNUTPORT, PA 18088

----- 15 new veries have been received since my last MUSING, coming from KBMR-1130-DX TEST, WDAE 1580, WCMF-1210, WJOX-690, KRZN-760-DX TEST, WTRK-1280, WNMH-750, WIOV-1240, WTCY-1400, WLYL-850, WIXN-1460-DX TEST, WPHY-560, WRVH-910, WTEM-570, WNO-1580-DX TEST, & last but not least, WGW873, the 10 watt TIS from George Mason Univ., Fairfax, VA on 1610, heard 12/3/93 6:42AM, for a total of 6250. WYLT's CE says I shouldn't have heard them, but the operator was confused by DST and switched to day power 1 hour early. Also received was a verie from

WNZE748, Roosevelt Island, NY on 1620 as well as dups for reports on the DX TESTS from WNNZ-640, WCEI-1460, WSER-1550 & WNRK-1260, the latter confirming my reception of their 42 watt signal! WCEI & WNRK were courtesy of our esteemed editor, thanks a lot. Dave! What a novel idea to print WNRK's verie on clear plastic! One can have any color verie he wants by backing it with an appropriate color paper or he can add spice with a picture of his favorite dancing girl. The only recent catches to report are MYLT-850 on 4/5 & 4/6 5:57-6:45AM, WTCY-1400 on 4/28 6:47-7:35AM, & WTEM-570 on 5/9 12:56-1:24AM, all now verified. After many fruitless searches for WTEM 570, they were found blasting in on 5/9 when they were non-directional for antenna work. I'm still looking for a verie from the WRCA-1330-DX TEST of 10/25/93 along with about 17 others. I was all primed to do some eclipse DXing on 5/10 when I received an emergency phone call at 7AM from the local judge-electrons to help out at the polls, so that shot that idea. I must take exception to the item in the DX TIME MACHINE of 25 years ago in the 6/20/94 DX NEWS, regarding J. Warren Routzahn, York, PA being the last remaining chatter member of the NRC. My 1st membership card, signed by Robert H. Weaver, is dated 11/17/33 (see the NRC 50th Anniversary Book, page 10) and my joining was noted in the 11/22 1933 issue of DX NEWS. The 1/10/34 issue carried this item: "We want to welcome into our club Warren Routzahn, York, PA as a new member" (just to keep the record straight). With a lifetime of DX behind me, one must marvel at the changes that have occurred in BCB DX, most of them for the worse. Would that it were possible to go back to 1926, when I started to DX, with the equipment we have today! It would be fun to be able to cut through the sea of heterodynes that existed between 1100 & 1500 kilocycles before the advent of crystal controlled transmitters. Speaking of interference, I was bothered all of the past season with 'birdies' at the high end of the band, and extending to 1700 khz & beyond. I blamed them on the cable TV that runs past my house, but to which I am not connected. A few weeks ago, I had my son unplug his Zenith color TV set in the adjoining room when not in use and, presto!, the birdies disappeared completely. Now I'm ready for the long awaited expansion of the BCB! Best wishes to all for an enjoyable summer! 73 & Good DX!

MIKE BROOKER - 99 WYCHCREST AVENUE - TORONTO, ON M6G 3X8  
 - - - - - Why risk going blind from watching a solar eclipse when you can get some rare mid-day "eclipse skip" DX? The near total eclipse on 5/10 (the last such eclipse here until well into the next century) produced some unusual conditions. Stations in Detroit & Sarnia (in the direct path of the eclipse) were booming in, but none of the NYC 50000 watters were heard. Not even WQEW-1560, which is always the 1st station to come in at sunset. A 2nd harmonic of CPTR-680 was noted on 1360 (680 x 2) during the eclipse, but its not likely related. Still no word on a flagship for Toronto's new NBA expansion team, the Raptors. Could be CPFR, which carried the Knicks-Rockets NBA finals, of Fan-1430 (CJCL). By the time the Raptors tip off in the fall of 95, Fan-1430 could be Fan-590, if Telemedia's bid to buy CKYC 590 and move from 1430 to 590 is approved by the CRTC. Veries received from WCCW-1130, WDAS-1480, WJIB-740, WRND-560, KSMR-1130 & WESC-660. Still no verie received from WCGC-1270 for their test. I also got a "verie" nice letter from Nila Nannu in Bangladesh, she wrote before her penpal request showed up in the 2/14 DX NEWS. Maybe she can get me a verie from Radio Bangladesh? It was one of my better SW catches that never verified a report I sent in 1989. 73's (& 89's to Nila!)

ERNEST COOPER - 5 ANTHONY STREET - PROVINCETOWN, MA 02657  
 - - - - - The verie total has inched up to 4461 with these in since I last checked in here in the MUSINGS CENTER: WMVP-1000 IL, WPHY-560-PA, WKDV-1460-VA, WKDB-1570-MD, WAAV-980-NC, CCR-1020 Turks & Caicos, & WIWO-1580-IN. The WKDV & WKDB veries are on one letter sent from WKDV. The WAAV verie is typed on a file card! Caribbean Christian Radio was mailed in Turks & Caicos, although I sent the report to their FL address. Some have sent their reports to the Islands and received veries from FL, it works both ways! DX of most recent date: 3/30 WKDV-1460 breaking through again at 1:51AM and their verie answers my question as to why they put on childrens programs during the wee hours of the morning. The signer told me that it is for kids who can't get to sleep or who may be sick and up taking medication! That should give them an audience of about 31! 4/17 at 12:57AM on 1530, these words: "Now this was WCRY, now WSAI, 1530", then into NBC news. On 4/18, the new WSAI heard with gospel at 12:57AM. Then, to 980 & WAAV was doing fairly well, for a 2nd report, which brought forth that immortal file card mentioned above. 4/24 12:56AM, Phillies baseball noted on 1580 and it turned out to be WONZ-NJ, logged and reported but no verie yet, 1:13AM. Tough verification WASH-1590-NY was noted on the same morning at 1:30AM. 5/1 on 1620 a very weak signal with these words noted: "Hold the money outside the window", "Welcome to ---", "Motorist delays", "open to any vehicle carrying fuel", "Department of Transportation", "\$2000 a year, up to \$3000 a year", "Taking a bus" & "you also save money". (Sounds like Radio Monopoly to me or a spur from WRJM 1450-DWS). 1460 has been my best frequency for newies this past season and on 5/7 I added WCRY-MC 12:58-1:46AM. I'd had probably had one more had I not forgot the WPMR-PA test! Then, Bob & I enjoyed an 18 day vacation in Frederiksted/St. Croix, US

virgin Islands. Some interesting doings on the daytime dial there: Antigua & Barbuda-620 often IDs as 'Radio ABS'. On 690, an unsolved mystery. The Caribbean Beacon was there, but with a 2nd station on the same frequency, but not causing any of the fast fade with the Beacon! One of them kept running 1/2 hour tapes of Dr. Jean Scott (male). I did hear an ID for a SW station in Memphis, WW -, but only once, other times there was only dead air between tapes. On 880, there was 'VOI', using 2 different slogans, 'Voice of Inspiration' & 'Voice of the Islands'. They are Roman Catholic & are in Dominica. WSTA-1340 is on the LA Dodgers network! Forward - March!

NIKE HARDESTER - 3118 GAITWAY COURT - JACKSONVILLE, NC 28546-6973  
 - - - - - Greetings! Unfortunately, I missed the RCJB Special Test but may be next time....PLEASE let there be a next time! On the subject of DX TESTS, I've yet to receive a reply for reports on tests from KSD-550, WFRB-560, WYNI-930 & KDLA 1010. For WYNI & KDLA, I included a tape since reception was not that great. On the flip side, I sent a thank you card to a station, mention a couple of code IDs being heard and received a card in reply! Unfortunately, no can count as I'm not even sure I heard the station! The updating of the TIS/HAR list for the IRCA AM-FM ALMANAC is progressing, and all input is welcome. An interesting addition may be added if I can get enough information, Carrier Current Stations. Normally, these stations have a range covering the campus, but in one report received, the range was reported at almost 40 miles! If you have any information on any carrier current stations, please drop me a note. Even if you only know that a school has such a station, let me know and I'll follow up. Also, I'm trying to obtain a mailing address for the Raleigh-Durham Int'l Airport. Thanks, 73's a best of DX!

DAVE SCHMIDT - P O BOX 11502 - WILMINGTON, DE 198\*0  
 - - - - - We're staying busy through these summer months this year and we're glad of it. After a few pushed up start dates, WKHT-89.1 should be on the air by the time this hits print. We've also started doing some work with WPEB-88.1 in Philadelphia. One of the announcers whom I worked with at WAMS got into a neat way to find out if running a station is really for him or not, he has leased WECY-1280 and is featuring a 70's format, nothing but music from the 70's. Initial response is good. We also had a visit with WBDX-1570, featuring the same type of format. If your a NEW MEMBER this year, why not introduce yourself with a MUSING! And keep in mind, the start of the new publishing season is the usual time to start off with a reintro MUSING, keep that in mind! Have a safe summer!

| TOWER TIP                                                                                                                                                                                               | TOWER TIP                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>WSMN - 1590 - Nashua, NH<br/>5,000 / 5,000 Watts U3</p> <p>CONTRIBUTED BY: Bruce Conli</p> <p>WHAT TO LOOK FOR: 3 towers next to church parking lot. Studios are in nearby building on Route 111</p> | <p>WMVT - 900 - Nashua, NH<br/>910 / 50 Watts U1</p> <p>CONTRIBUTED BY: Bruce Conli</p> <p>WHAT TO LOOK FOR: Single unpainted tower in The Millard factory complex.</p> |

GOT A TOWER TIP? SEND DETAILS TO JOHN BOWKER, 1811 FORT DUQUESNE DRIVE, SUN CITY CENTER, FL 33573. YOUR MAP WILL BE RE-DRAWN.

DID YOU KNOW that a 10-Watt station in Vermont used to provide good coverage in a car for up to an hour as one passed through the town. This was largely due to a lack of electrical interference from power lines along the highway and the 35 mph speed limits!



# Target DX

DX'ing 'smart', with shared tips and requests by NRC members

## Ground Conductivity

Eric Bueneman makes some observations...

"Your ability to null locals is dependent on where you're located in relation to the center of a large city, the ground conductivity value, and position on the dial. If you live in an area with low ground conductivity, such as Atlanta, your daytime regulars may become nighttime DX targets. If you live in an area with high ground conductivity, such as St. Louis, Kansas City, Topeka, or Milwaukee, a low frequency local may also be of local quality in the next market (such as WTMJ-620 being a local in Chicago or Madison, WIBW-580 being a local in Kansas City, likewise for WDAF-610 in Topeka or WDAF and KSD-550 in Columbia/Jefferson City). That's something to take into consideration next time you're on the road with your portable DX machine."

Perhaps the best way to explain the relationship between ground conductivity and mediumwave radio is by the example of the half-wave antenna, which depends upon ground to make it an electrically equivalent full-wave antenna. The half-wave antenna has a physical length that is one-half of the wavelength of the desired frequency. The ground becomes the other half of the wave, as shown in Figure 1. From this, it's easy to conclude that if the ground conductivity is poor, then the ground half of the wave will encounter resistance, resulting in reduced signal level.

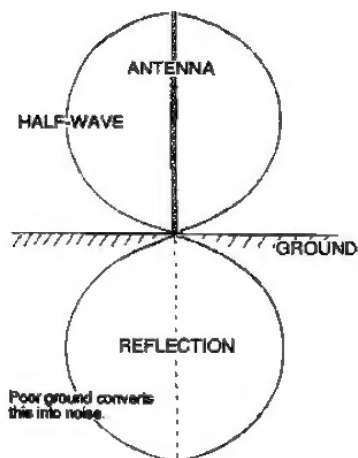


Fig. 1 - Half-wave antenna and ground reflection.

Bruce Conti bc@lexicon.com

46 Ridgfield Drive

Nashua, NH 03062-1174

Ground conductivity is usually measured in units called mhos. Who is simply ohm spelled backwards, with the ohm being the more familiar unit of resistance. Think of conductivity as being the opposite of resistivity... you got it!

The best ground conductivity is found in fertile soil (15-30 mhos), swamps, and salt marsh areas. The conductivity of sea water is 5000 mhos. The worst is in rocky areas and city downtown sections (0.5-8 mhos). Typically, the central plains of the US and Canada have the highest conductivity, while the Rocky mountains and New England Appalachians are among the lowest.

No matter what size your antenna is, a good ground is important to get the most out of your setup. There are some ways to improve your ground, even if the region is characteristically poor. Try running a ground radial parallel to the receiving antenna wire. The ground radial does not have to be buried, but can just rest on the ground. Running several other radials from your receiver ground rod can also help. Chicken-wire also makes a good ground-plane.

The following bandscan indicates what salt water conductivity can do for your DX..

## Bandscan

Contributed by Mark Connelly, WA1ION, Billerica, MA:

Daytime Groundwave Bandscan, Granite Pier DXpedition Site, Rockport, MA

"Most receptions were made on a Realistic DX-440 with RTL-2 loop phased against a remotely tuned whip through the DCP-1 Dual Controller/Phaser."

"Signal strengths are rated on a relative 0 - 5 scale: 0 = carrier in noise, 1 = weak with bits of audio, 2 = poor, 3 = fair, 4 = good, 5 = excellent, \* = with dominant nulls."

| FREQ | SIG | CALL    | LOCATION           |
|------|-----|---------|--------------------|
| 530  | 1   | WNUE384 | MA - Tyngsboro     |
| 540  | 2   | WLIX    | NY - Islip         |
|      | 1*  | CJSB    | ON - Ottawa        |
|      | 1*  | WDMV    | MD - Pocomoke City |
|      | 1*  | CBT     | NF - Grand Falls   |
| 550  | 4   | WICE    | RI - Pawtucket     |
|      | 2*  | WDEV    | VT - Waterbury     |
|      | 2*  | CFNB    | NB - St. John      |
| 560  | 5   | WGAM    | ME - Portland      |
|      | 2*  | WHYN    | MA - Springfield   |
| 570  | 3   | WMCA    | NY - New York      |
|      | 1*  | CJEM    | NB - Edmundston    |
| 580  | 3   | WTAG    | MA - Worcester     |
|      | 1*  | CJFX    | NS - Antigonish    |

|      |    |      |                    |      |    |       |                       |
|------|----|------|--------------------|------|----|-------|-----------------------|
| 590  | 5  | WEEI | MA - Boston        | 1090 | 5  | WILD  | MA - Boston           |
| 600  | 2  | WICC | CT - Bridgeport    | 1100 | 1  | WHLI  | NY - Hempstead        |
|      | 1* | CIQC | PQ - Montreal      | 1110 | 3  | WHIM  | RI - Providence       |
|      | 1* | CKCL | NS - Truro         |      | 3  | WNNW  | NH - Salem            |
| 610  | 3  | WGIR | NH - Manchester    | 1120 | 3  | WADN  | MA - Concord          |
| 620  | 4  | WZON | ME - Bangor        | 1130 | 2  | WBBR  | NY - New York         |
|      | 1* | WVMT | VT - Burlington    | 1140 | 2  | CJTR  | PQ - Trois-Rivieres   |
|      | 1* | WSKQ | NJ - Newark        |      | 1* | CBI   | NS - Sydney           |
| 630  | 4  | WPRO | RI - Providence    | 1150 | 4  | WMEX  | MA - Boston           |
|      | 3* | CFCY | PI - Charlottetown | 1160 | 2  | WSKW  | ME - Skowhegan        |
| 640  | 2  | WNNZ | MA - Westfield     | 1170 | 4  | WKPE  | MA - Orleans          |
| 660  | 4  | WFAN | NY - New York      |      | 2* | WDIS  | MA - Norfolk          |
| 680  | 5  | WRKO | MA - Boston        | 1180 | 1  | WJFF  | RI - Hope Valley      |
| 690  | 3  | CBF  | PQ - Montreal      | 1190 | 2  | WLIB  | NY - New York         |
| 700  | 4  | CHSJ | NB - St. John      | 1200 | 4  | WKOX  | MA - Framingham       |
| 710  | 3  | WOR  | NY - New York      |      | 1* | unID  | ?? - prob. Brewer, ME |
| 720  | 3  | CHTN | PI - Charlottetown | 1210 | 1  | WOGL  | PA - Philadelphia     |
| 730  | 4  | WJTO | ME - Bath          | 1220 | 3  | WSME  | ME - Sanford          |
|      | 1* | WACE | MA - Chicopee      |      | 2* | WRIB  | RI - Providence       |
| 740  | 4  | WJIB | MA - Cambridge     |      | 1* | CKCW  | NB - Moncton          |
|      | 1* | WGSM | NY - Huntington    | 1230 | 5  | WESX  | MA - Salem            |
| 750  | 1  | CBGY | NF - Bonavista Bay | 1240 | 4  | WUOK  | MA - West Yarmouth    |
| 760  | 4  | WVNE | MA - Leicester     |      | 1* | WOON  | RI - Woonsocket       |
| 770  | 3  | WABC | NY - New York      | 1250 | 1  | WARE  | MA - Ware             |
| 780  | 2  | CFDR | NS - Dartmouth     | 1260 | 5  | WEZE  | MA - Boston           |
| 790  | 4  | WLKW | RI - Providence    | 1270 | 4  | WTSN  | NH - Dover            |
|      | 1* | WRUM | ME - Rumford       | 1280 | 3  | WABK  | ME - Gardiner         |
| 800  | 4  | WCCM | MA - Lawrence      |      | 2* | WEIM  | MA - Fitchburg        |
|      | 2* | CJAD | PQ - Montreal      | 1290 | 2  | WRCP  | RI - Providence       |
|      | 1* | CHRC | PQ - Quebec City   |      | 1* | WKNE  | NH - Keene            |
| 810  | 2  | WGY  | NY - Schenectady   | 1300 | 5  | WJDA  | MA - Quincy           |
|      | 1* | CJVA | NB - Caraquet      | 1310 | 4  | WLOB  | ME - Portland         |
| 820  | 1  | WNYC | NY - New York      |      | 2* | WORC  | MA - Worcester        |
| 830  | 0  | CFJR | ON - Brockville    | 1320 | 2  | WDER  | NH - Derry            |
| 840  | 1  | WRYM | CT - New Britain   |      | 2* | WARA  | MA - Attleboro        |
| 850  | 5  | WHDH | MA - Boston        |      | 1* | CKEC  | NS - New Glasgow      |
| 870  | 3  | WLAM | ME - Gorham        | 1330 | 3  | WRCA  | MA - Waltham          |
| 880  | 3  | WCBS | NY - New York      | 1340 | 3  | WNNH  | NH - Madbury          |
| 900  | 4  | WCLZ | ME - Brunswick     |      | 3  | WNBH  | MA - New Bedford      |
|      | 3* | WMVU | NH - Nashua        |      | 2* | CJLS  | NS - Yarmouth         |
|      | 2* | CKDH | NS - Amherst       | 1350 | 2  | WLNH  | NH - Laconia          |
|      | 1* | CKTS | PQ - Sherbrooke    |      | 1  | WJNY  | CT - Putnam           |
| 910  | 3  | WABI | ME - Bangor        | 1360 | 4  | WLYN  | MA - Lynn             |
|      | 1* | WNEZ | CT - New Britain   | 1370 | 2  | WFEE  | NH - Manchester       |
| 920  | 4  | WHJJ | RI - Providence    |      | 1* | WDEA  | ME - Ellsworth        |
|      | 2* | CJCH | NS - Halifax       | 1380 | 4  | WCQL  | NH - Portsmouth       |
| 930  | 5  | WZNN | NH - Rochester     |      | 1* | WNRI  | RI - Woonsocket       |
|      | 2* | CFBC | NB - St. John      | 1390 | 4  | WPLM  | MA - Plymouth         |
| 940  | 2  | CBM  | PQ - Montreal      |      | 1* | WRIV  | NY - Riverhead        |
| 950  | 5  | WROL | MA - Boston        | 1400 | 4  | WIDE  | ME - Biddeford        |
| 960  | 1  | CHNS | NS - Halifax       |      | 3* | WLLH  | MA - Lowell           |
| 970  | 5  | WZAN | ME - Portland      |      |    |       | Lawrence              |
| 980  | 4  | WCAP | MA - Lowell        | 1410 | 3  | WMSX  | MA - Brockton         |
| 990  | 2  | WALE | RI - Providence    |      | 1* | WPQP  | CT - Hartford         |
|      | 1* | CKIS | PQ - Montreal      |      | 1* | CIGO  | NS - PortHawkesbury   |
| 1000 | 2  | CKBW | NS - Bridgewater   | 1420 | 3  | WBSM  | MA - New Bedford      |
| 1010 | 2  | WINS | NY - New York      |      | 2* | WASR  | NH - Wolfeboro        |
| 1020 | 2  | WNTK | NH - Newport       | 1430 | 5  | WXKS  | MA - Everett          |
| 1030 | 5  | WBZ  | MA - Boston        | 1440 | 4  | WLPZ  | ME - Westbrook        |
| 1050 | 2  | WEVD | NY - New York      |      | 2* | WVEI  | MA - Worcester        |
|      | 1* | WBNC | NH - North Conway  | 1450 | 5  | WNBPN | MA - Newburyport      |
| 1060 | 4  | WBIV | MA - Natick        |      | 2* | WRKD  | ME - Rockland         |
|      | 2* | CJRP | PQ - Quebec City   |      | 1* | WKXL  | NH - Concord          |
| 1070 | 2  | CBA  | NB - Moncton       | 1460 | 4  | WBET  | MA - Brockton         |
| 1080 | 3  | WTIC | CT - Hartford      |      |    |       |                       |

|      |    |      |                  |
|------|----|------|------------------|
| 1470 | 3  | WSRO | MA - Marlborough |
|      | 2* | WKZU | ME - Lewiston    |
| 1480 | 3  | WSAR | MA - Fall River  |
| 1490 | 4  | WFOR | ME - Portland    |
|      | 3* | WHAV | MA - Haverhill   |
|      | 2* | WMRC | MA - Milford     |
| 1500 | 1  | WFIF | CT - Milford     |
| 1510 | 5  | WSSH | MA - Boston      |
| 1520 | 1  | WGAM | MA - Greenfield  |
| 1530 | 2  | WCEG | MA - Middleboro  |
|      | 1  | WDJZ | CT - Bridgeport  |
| 1540 | 4  | WMYF | NH - Exeter      |
|      | 2* | WADK | RI - Newport     |
| 1550 | 4  | WNTN | MA - Newton      |
| 1560 | 1  | WQEW | NY - New York    |
| 1570 | 4  | WNSH | MA - Beverly     |
|      | 3* | WPEP | MA - Taunton     |
| 1580 | 1  | WLIM | NY - Patchogue   |
|      | 1  | CBJ  | PQ - Chicoutimi  |

|      |    |      |                 |
|------|----|------|-----------------|
| 1590 | 2  | WARV | RI - Warwick    |
|      | 2  | WSMN | NH - Nashua     |
| 1600 | 4  | WUNR | MA - Brookline  |
|      | 1* | WLNG | NY - Sag Harbor |

Mark mentions that WRZ-1030 was nulled to receive WNTK-1020, WLNH-1350 has sometimes been inactive, and WCFG-1530 has been inactive in 1994. It's interesting to note some of the differences when compared to my inland Nashua location. For example, WWRL is heard in the null of WUNR-1600, many stations from the Canadian maritimes are difficult if not impossible to hear day or night (like CBT-540, CKDH-900, CBI-1140, or CJS-1340), and WOGI-1210 is a no-show during daylight hours here in Nashua.

### Bandscan Special Edition

Contributed by Jean Burnell, St. John's, Newfoundland.

"The week the family spent in the sun at Jaco on the Pacific coast of Costa Rica last year was such a welcome break from our seemingly interminable St. John's winter, we decided to do it again. Last year I managed to DX/ bandscan in the evenings, and the results appeared in the May 3, 1993 *DX News* (Vol 60, No 25). This time I brought along the DX-440 again, and the antenna was the same piece of wire (about 30 meters) that I ran along the hotel balcony at night. Again, I DXed mainly at night, but this time I also put in two daytime sessions (with just the built-in antenna) between dips in the surf and the pool."

"During daylight quite a few Costa Rican stations were audible that were overwhelmed at night by stations in Honduras and neighboring Nicaragua. The logs include

all of the stations that had more than marginal audio during the daytime and most of the heavy-hitters at night. This list is more comprehensive than the 1993 version, but there were dozens of stations logged in 1993 that I did not hear in 1994. Thus, the two reports are complementary, and I hope the information is useful for DXers interested in the area."

"I have noted some changes since 1993 and some omissions from WRTH '94. The accuracy of the frequencies of most stations was not checked. The DX-440 displays frequency to the nearest 1 kHz, but in some instances I have reported frequencies to the nearest 0.1 kHz. This was done by using the BFO. I do not need to use this technique often these days, so readers should be warned that my estimates may not be without error. (Dates and times in these logs are UTC)"

- 530 COSTA RICA R.Rumbo, TICAL, Cartago, MAR 18 2048 - LA mx, «en Rumbo es 2 horas 48 minutos 15 segundos» which was indeed accurate. SIO 354.
- 540 NICARAGUA R.Corporación, INOW, Managua, MAR 18 0511 - News read by 2 men, ID. SIO 544.
- 570 COSTA RICA R.Fundación, TICAL, Desamparados, MAR 18 2051 - Música romántica, «Música Fundación» jingle and more ballads. SIO 555.
- 580 HONDURAS Cadena Corporación de Radiodifusión (HRZQ?), Tegucigalpa, MAR 17 0330 - Unequivocal ID «Esta es la Cadena Corporación de Radiodifusión», TC as «9 con 30» then «noticias nacionales». Weak and fadey, SIO 242. Note that WRTH '94 says this is HRZQ «La Súper T», which in the '93 WRTH was R.Tegucigalpa, the IDs that I did indeed note here in 1993. However, now R.Tegucigalpa, which sounds like it did on 580 in 1993, is on 1190.
- 590 COSTA RICA R.Nacional, TIRN, San José, MAR 18 2055 - «Radio Nacional de Costa Rica presenta las noticias de última hora.» SIO 455.
- 600 HONDURAS La Voz del Centroamérica, HRVW, La Ceiba, MAR 17 0401 - News of police checking «sedulas» in Puerto Lempira, later about the Universidad de Honduras, TC 4 minutes fast, //650. 443.
- 610 HONDURAS R.Ámerica, HRLP, Tegucigalpa, MAR 16 0332 - Announcement included «aquí en Tegucigalpa», then sports program. SIO 343.
- COSTA RICA R.Sistema Universal, TIRSU, Guadalupe, MAR 18 2057 - US Top-40 music, PSAs and ads, «en Universal» and «90.7 FM» mentioned frequently. SIO 354

- 620 NICARAGUA R.Nicaragua, YNMN, Managua, MAR 16 0324 - ID include phrase «la nueva Nicaragua», ID, commentary on the Int'l Monetary Fund. SIO 444. MAR 18 0510 - Talk about swimming, TC, song called *Que Triste* and public notice about water interruptions in Managua. Flutters, SIO 443. MAR 19 2200 - fútbol commentary, mentioned R.Nicaragua. SIO 353.
- 630 HONDURAS R.Ámerica, 3 locations, MAR 20 0352 - Ads mentioning Tegucigalpa, talk about water, '70s disco song, // 610. SIO 332.
- 640t ECUADOR R.Nacional, HCXYI, Quito, MAR 16 0328 - Frequency was a mess, one «Radio Nacional» mention came through. SIO 222.
- CUBA R.Progreso (CMBC/CMDO?), Guanabacoa and/or Las Tunas, MAR 16 0357 - News (unmistakably Cuban), two IDs, QRMed by 2 stations including tentative Ecuador. SIO 232.
- COSTA RICA R.Musical, TIJ, Moravia, MAR 18 2103 - Mellow tunes with few announcements, but caught «programa de Musicales» between tunes at 2118. SIO 252.
- 650 HONDURAS La Voz de Centroamérica, HRVW, presume San Pedro Sula and others, MAR 17 0412 - News, // 600, audible weakly, SIO 222, under a strong station (SIO 444) relaying VOA in SS with *Panorama Deportivo* (not // 1580). MAR 18 0336 - At least 3 stations, one with news IDed as «La Voz de Centroamérica». SIO 322. MAR 18 0453 - Dominant was a Hollywood news feature in SS from VOA, while the station underneath seemed to s/ff at 0456 with «La Voz de Centroamérica» ID, no anthem. However, at 0459 the dominant station had news from San Pedro Sula // 600, which I thought was LV de Centroamérica too! Dominant SIO 433. Activity on this frequency is confusing! NICARAGUA R.Nicaragua, Bluefields (?), MAR 19 2201 - YNMN relay, fútbol play-by-play, definitely parallel 620. SIO 252. This one listed in the '93 WRTH, but not in '94.
- 650t PANAMA R. Mía, HOS22, Panamá, MAR 18 0358 - Faded up in a mess with what sounded like an ID (echoed), «sintonize Mía», but was pretty garbled. Very tentative. SIO 222/1.
- 655 EL SALVADOR R.El Salvador, YSS, San Salvador, MAR 19 0311 - Presumed to be El Salvador, weak with muffled audio, woman talking over music. SIO 252.
- 660 HONDURAS La Voz de Honduras, HRNN18, La Ceiba, MAR 16 0403 - Faded above a morass of weak signals with «H-R-N, La Voz de Honduras presenta *Tegucigalpa de Noche*» news program. 232.
- 670 COSTA RICA R.Monumental, TTINT, San José, MAR 18 2111 - Talk of 25th anniversary of the Costa Rican Teachers Union. SIO 555.
- 680 NICARAGUA R.La Primerísima, YNAM, Managua, MAR 19 0314 - Song interrupted by woman with «La Primerísima» ID, then at 0315 interrupted again by inaccurate TC «precisamente 9:20». SIO 433.
- 690 ECUADOR R.Sucre, HCFA4, Portoviejo, MAR 18 0517 - 3 or 4 IDs every minute, TCs, dedications, and dance music. Local noise QRM, SIO 333.
- HONDURAS La Voz de Honduras, 3 sites, MAR 19 0331 - Ads mentioning Honduras, muffled ID, more ads, 0335 TC as 9:35, talk from «estadio nacional» and then faded out. SIO 333.
- 700 ECUADOR R.Sucre, HCRS2, Guayaquil, MAR 18 0520 - Phone calls, R.Sucre IDs, not //690. 444.
- COSTA RICA R.Sonora, TJC, Guadalupe, MAR 18 2114 - A man and a woman talking earnestly, sometimes over music. «Bienvenidos a vidas nuevas...». Low het, SIO 243.
- 720 NICARAGUA R.Católica, YNRC, Managua, MAR 15 0447 - ID and s/ff with Beethoven's *Ode to Joy* theme to 0449, no anthem. SIO 344. MAR 16 0405 - «Radio Católica de Nicaragua» ID, news item about US blaming bombs in Managua on Sandinistas. SIO 343.
- 730 MEXICO XEX, México, MAR 16 0407 - «Recuerdos» and TCs with male DJ and music. SIO 343.
- COSTA RICA R.Reloj, TIHB, San José, MAR 18 2121 - Airline arrival/departure info from «aeropuerto internacional Juan Santamaría», then ID «esta es Reloj, 3:23 minutos», ticking, música romántica. SIO 354.
- 730t BELIZE R.Belize, Ladyville, MAR 19 0358 - Likely Belize, but fragmentary due to QRM and QSB, with religious preaching in EE. Three stations fighting it out here, SIO 322/1.
- 740 HONDURAS R.Eco, HRNN23, San Pedro Sula, MAR 16 0408 - «Eco-Eco-Eco» ID, ads, cuckoo clock noises, and talk regarding a bomb in Managua. SIO 333.
- NICARAGUA R.Sandino, YNRS, Managua, MAR 19 2205 - Fútbol not //620, «Hora del Sandino» TCs. SIO 344.
- 760 EL SALVADOR R.Cadena, YSKL, unknown location, MAR 18 0527 - News ended, announcer thanked listeners, s/ff routine with unequivocal IDs mentioning 770 and 780, anthem to 0538. No sign of R.Columbia at this time, SIO 332.
- COSTA RICA R.Columbia, TIW, San José, MAR 18 2124 - Man invited «Ticos» to phone immediately to start paying for an unclear offer... one wonders how many fail intelligence tests like this one! SIO 555.
- 770 COLOMBIA RCN, HJJK, Bogotá, MAR 19 0211 - Fútbol on «Radio Cadena», heard «¡A gooooooal!»,
- 780 EL SALVADOR R.Cadena, YSKL, 4 relays listed, MAR 16 0411 - Garbled audio, possibly because more than one outlet was being received, but definite ID twice, then talk about politics. SIO 332.
- 790 HONDURAS R.Satélite, HRTG2, Tegucigalpa, MAR 15 0453 - ID, fanfare (like at racetrack), then «Atención...» and many names were called. SIO 333.

- 800 NETHERLANDS ANTILLES TransWorld Radio, PJB, Bonaire, MAR 20 0506 - Religion in Spanish, Caracas telephone number. SIO 344.
- 810 COLOMBIA CARACOL Colombia, HICY, Bogotá, MAR 20 0510 - Fútbol results (German league). ID with hype, fútbol results from Argentina, then tennis. SIO 343.
- 820 HONDURAS R.Moderna, HRLP16, Tegucigalpa, MAR 19 0455 - ID folo by ann. of job opening. COSTA RICA R.Centro, TIGC, Tibás, MAR 18 2127 - Up-tempo music, jingle, TC and lottery ad. DJ said «La nueva música Centro». SIO 243.
- 831r NICARAGUA R.Zinica, YNRZ, Bluefields, MAR 19 0455 - Muffled audio with talk about El Salvadoran politics, then something about Nicaragua. Het, SIO 232.
- 840 CUBA DobleVé, CMHW, Santa Clara, MAR 18 0550 - Cuban music, s/off with nice ID at 0559. slogans (¡Patria o muerte, venceremos!) and anthem to 0600. Local electrical QRM. SIO 333.
- 860 HONDURAS R.San Pedro, HRBS, San Pedro Sula, MAR 16 0431 - Ads, US pop song, clear «Radio San Pedro» ID in the middle of the song. SIO 343. ('94 WRTH also lists this on 850, with notation of nominal frequency of 860. Jean mentions that 860 is now definitely the nominal frequency. - ed)
- 869.8 COSTA RICA R.Universidad de Costa Rica, TTUCR, San José, MAR 18 2133 - Certainly this one with orchestral music by Tchaikovsky. SIO 454.
- 870 EL SALVADOR R.Cadena de Oro, YSAR, San Salvador, MAR 18 0557 - Just in time for s/off ann.
- 880 EL SALVADOR R.Cadena de Oro, unknown location, MAR 19 0342 - Numerous «Cadena de Oro» IDs, interviews about water shut-offs, news report about Nicaragua. UTC -6 TC. SIO 443. Does R.Ritmo relay YSAR? I should have checked 870 parallel, but didn't!
- 890 CUBA R.Rejón, unknown location, MAR 18 0601 - News by two males, ID and time pip. SIO 344.
- 900 NICARAGUA R.Tiempo, YNRT, Managua, MAR 16 0438 - IDs and slogan «Entre tú y yo, solo Radio Tiempo» and accurate time every minute over music, which included rap and música romántica. MEXICO La Voz de la América Latina, XEW, México, MAR 18 0555 - Two IDs before soft folk-sounding music. Strong hets, SIO 422.
- 930 COSTA RICA R.Sapirisa, TZRCR, Zapote, MAR 18 2141 - Ballads and some livelier music. No real ID heard, noted ads for stores in San Pedro and Zapote. SIO 253. MAR 19 2150 - PSA for Costa Rican agency, LA ma.
- 960 COLOMBIA CARACOL Caribe, HIOP, Magangué, MAR 15 0501 - Frequency was a mess with 2 stations battling, IDs and talk about fútbol game. QRM from R.Exitos, SIO 322.
- HONDURAS R.Exitos, HRNN22, San Pedro Sula, MAR 15 0502 - «Radio Exitos, la romántica» and ballads. SIO 322 with CARACOL QRM.
- 980 COSTA RICA R.Cordillera, TIRI, Esparza, MAR 16 0256 - ID and welcome to visitors in SS and EE, also info on tides in SS and EE. SIO 444. MAR 18 2150 - «La hora en Cordillera». Freq slightly low.
- 990r MEXICO, XET, Monterrey, MAR 16 0446 - Hyper promo for their «Discoteca», mentioned México.
- 1020r TURKS & CAICOS Caribbean Christian R., Grand Turk, MAR 15 0510 - No ID but very likely this with energetic preaching in Spanish. SIO 333.
- COLOMBIA RCN, HJFG, Pereira, MAR 15 0515 - fade down by Turks left this with «RCN» ID. 222.
- 1024.5 COSTA RICA R.MJ-veinte, TITIC, San José, MAR 18 2153 - Certainly this with SS cover version of the Guees Who's *Those Eyes* and early '60s tunes. Few announcements between songs. SIO 354.
- 1040 COSTA RICA R.Fides, TIAC, San José, MAR 18 2156 - Announcement started with «Amigos de Radio Fides...» over flute music, then Gregorian chant. Local electrical noise QRM, SIO 332.
- COLOMBIA R.Tropical (HJ??), Barranquilla, MAR 20 0531 - On long after listed 0200 s/off. Excited, from-the-street intro of dance music, two «Tropical» IDs, but sounded like festivities were from Cartagena. SIO 344.
- 1060 COSTA RICA R.Columbia, TILX San Isidro and/or TIMS Liberia, MAR 18 2158 - «Noticias de Radio Columbia», jingle at 2159 and more news parallel 760. SIO 253.
- 1080 GUATEMALA R.Novedad, TGLU, Zacapa, MAR 15 0341 - «Radio Novedad, 10-80, la nueva estéreo de Zacapa», música romántica, ads with lots of sound effects at 0357, more IDs and TC for «22 horas». SIO 443.
- COSTA RICA Faro del Caribe, TIFC, San José, MAR 18 2200 - Presumed this with talk regarding human rights in Cuba. SIO 344.
- 1100 COSTA RICA R.Chorotege, TISCR, Santa Cruz, MAR 18 2208 - «Atención...» then many messages mentioning Santa Cruz, Puntarenas, and Guanacaste, two IDs as «Radio Chorotege, una emisora diferente», then rustic guitar music. SIO 454.
- 1110 MEXICO R.Red, XERED, México, MAR 20 0600 - «Radio Red» IDs, news to 0604, faded out, 332.
- 1120 unID, MAR 16 0449 - Ad string started with election ad «Vota seguro, vota Jorge» and an ad/slogan for «Sonido dos mil dos». Definitely not Sonido 11-20 (which was not heard at all on this trip - not even a carrier delay!) because Costa Rican elections were a month earlier. Thus, most likely was La Romántica, YSLR, El Salvador, or possibly a long shot Sonido de Mexicali, XEMX? SIO 332.
- USA KMOX, St.Louis, MO, MAR 20 0557 - Almost certainly this with end of EE jazz program, promo for jazz concerts, believed to be in St.Louis, but no ID heard. SIO 332.

- 1130 USA KWKH, Shreveport, LA, MAR 20 0538 - C&W music, Shreveport Chevy dealer ad at 0552. IDed as just "WKH", then "Here's Gene Watson for you at the radio ranch..." and more music. 444.
- 1140 USA WQBA, Miami, FL, MAR 16 0550 - Woman interviewed in Spanish about Cuba, under a much more interesting unID station playing unusual Middle Eastern-sounding flute and drum music. The dominant unID station had UTC -5 TCs, and signed off at 0556, leaving WQBA marginally clearer with fading. SIO 322.
- r COSTA RICA R.Monumental, TITNT, San Carlos and/or San Isidro de El General, MAR 15 0437 - Very poor with ad with prices in colones. SIO 242.
- EL SALVADOR R.El Mundo, YSTS, San Salvador, MAR 19 0236 - Elevator music, very few announcements until 0259, then ID and incomprehensible slogan. SIO 342.
- 1150 NICARAGUA R.Dario, YNUW, León, MAR 15 0400 - Music, short s/off announcement and anthem to 0403. MAR 15 0302 - ID «Radio Dario, su nueva radio», TC as «12-3 minutos», then Spanish cover versions of Eagles and Whitney Houston hits. 0355 s/off prayer, ID, anthem to 0357. SIO 333. Note that WRTH incorrectly lists s/off at 0300.
- 1159.5 COSTA RICA R.Columbia, TILXX, Puntarenas, MAR 18 0436 - Political commentary, ID, death notices. Frequency seemed unstable, SIO 553. MAR 18 2214 - Semireligious talk, not // 760. 555.
- 1170 COLOMBIA CARACOL, HUNW, Cartagena, MAR 15 0354 - CARACOL ID, talk about health. 343.
- 1180 USA VOA R.Martí, Marathon, FL, MAR 15 0534 - News reports in Spanish, «Radio Martí» ID and LA music. Much less strong than // 9525, SIO 333.
- COSTA RICA R.Victoria, TIPJ, Heredia, MAR 19 2148 - ID «...aquí en Radio Victoria», LA oldies and disco.
- 1190 HONDURAS R.Tegucigalpa (HRZQ?), Tegucigalpa, MAR 15 0410 - Unequivocal «Radio Tegucigalpa» IDs, ridiculously bombastic fanfares before «el noticiero de Honduras», ads, and talk program. No parallel signal discerned on 580. SIO 444. See also 580.
- 1200 COSTA RICA R. KW, TITQ, San José, MAR 18 2217 - Ads and talk regarding festival of San José (the next day), ID sounded more like «Radio Ka-Ve». Muffled audio made comprehension tricky.
- 1240 COLOMBIA RCN, HJFG, Armenia, MAR 16 0457 - «RCN» ID, then «CCN» news (confusing!), «RCN» ID again at 0500. SIO 333.
- 1280 COSTA RICA R.Alajuela, TIHT, Alajuela, MAR 18 2229 - End of *Enlace Juvenil* program «...aquí en Radio Alajuela», then sports program *Ovación* with fútbol results. SIO 454.
- 1290 PANAMA R.Guadalupe, HOS23, Panamá, MAR 17 0303 - Presumed R.Guadalupe, just caught «Voz de Panamá», then Panamanian anthem to 0304. SIO 242.
- 1330 EL SALVADOR R.Progreso, YSHQ, San Salvador, MAR 15 0435 - Religious music, ID, then another religious song. SIO 444.
- 1340 COSTA RICA R.Sideral, TIHR, San Ramón, MAR 17 1158 - S/on prayer, «Esta es Sideral» at 1203. SIO 443. MAR 18 2234 - PSA for milk producers, talk. SIO 454.
- COLOMBIA R.Uno, HJFB, Bogotá, MAR 18 0619 - TC at 1:18, rustic accordion music, IDs at 0628.
- 1360 COSTA RICA (not!) - Would have expected to hear the listed R.Monumental relay from Puntarenas if it were on, but nothing here at all during daylight hours on MAR 18 and MAR 19.
- 1370 unID, MAR 18 0502 - TC as «23:3 minutos», then election info, jingle (I'm pretty sure said «La Súper Fiera», which I believe is a wild animal), then tune called *Da Me*. Deep fades, SIO 332.
- 1380 COSTA RICA R.Guanacaste, TIMS, Liberia and/or San José, MAR 19 2050 - Ad string, LA pops. At 2125, ads for Banco de Costa Rica, then 5 seconds of silence at 2127 and a simple «Guanacaste» ID followed by about 15 seconds of dead air before music. SIO 353.
- 1390 HONDURAS La Voz Evangelica, HRVC, Tegucigalpa, MAR 17 0307 - Religious program. SIO 333.
- 1400 GUATEMALA R.Portela, TGRB, Puerto Barrios, MAR 17 0340 - Religious program to 0353, ID thanking listeners, then more preaching with ID again at 0359. Deep fades, SIO 332.
- 1420 COSTA RICA R.Fanta (probably TIBAS), Nicoya, MAR 19 2056 - LA ballad, ad string, 3 IDs «Radio Fanta, la emisora por todos los nicoyenses», *Impacto* program at TOH with a woman reading lots of names. SIO 454. This is listed in '94 WRTH as a relay of R.Columbia-760, but was not // 760.
- 1430 VENEZUELA R.Bahía, YVTP, Puerto La Cruz, MAR 20 0606 - Lively music, TC at 0610 as «a Bahía, 2 y 9 minutos», then «con Bahía» promo. Faded, SIO 342.
- 1480 COSTA RICA R.Puntarenas, TIW, Puntarenas, MAR 19 2107 - Song *Nada Más*, 3:11 TC at 2108, and ID. SIO 555.
- 1490 unID, MAR 17 0357 - Very weak, ID with «La voz de los...», but I could not decipher it (not even from the tape). Can't find anything like this listed in WRTH. SIO 242-1.
- 1500 COLOMBIA R. K, HJZH, Medellín, MAR 18 0420 - Two stations s fading in/out, only one IDed with LA music and IDs often as «el Súper K» and once as «Radio K». SIO 322.
- 1510.1 PANAMA Hosana R., HOA95, Panamá, MAR 20 0332 - Religious music in Spanish, «Hosana Radio» IDs. SIO 444.
- 1530 BELIZE VOA, Punta Gorda, MAR 18 0412 - News in English // 1580. Poor with KGBT QRM, 322.
- USA R.Panamericana, KGBT, Harlingen, TX, MAR 18 0414 - VOA faded down to reveal this in Spanish with ads, «Radio Panamericana» and KGBT IDs. SIO 322.



- 1540 BAHAMAS Bahamas R. Network, ZNS1, Nassau, MAR 15 0542 - Rel talk program in English. SIO 333. MAR 18 0404 - Woman wrapping up "News at 11", weather for Bahamas, and at 0405 "This is the Bahamas Radio Network" followed by "Radio Bahamas" jingle and C&W music. Local electrical QRM, SIO 433.
- 1560 COSTA RICA R.Nicoya, TJM, Nicoya, MAR 19 2111 - Old-style LA music with organ, no ID but a long ad string included *Plaza Comercio Nicoya*. SIO 353
- MEXICO R.Consentida, XEFAJ, México, MAR 20 0517 - PSA from «Secretaria del Salud», promo for *Música de la Sierra* program «en la Consentida», then song with accordian. SIO 343.
- 1579.8 unID, MAR 19 2115 - Child sings *Comple Años Feliz*, then miserable rustic music. Low het, 242.
- 1580 BELIZE VOA, Punta Gorda, MAR 18 0411 - News in English about Bosnia. Best signal in the band at this time, SIO 555. To bad this one is scheduled to go off permanently.
- unID, MAR 20 0429 - Faded up with ID that sounded like «Radio Rondaponde» — I don't know of any station that sounds like that! Perhaps s/off at 0458 as snatches of an anthem came through. 322.
- 1590 COSTA RICA R.16, TLGIJ, Grecia, MAR 19 2136 - Ballad *Nada Sin Ti*, accurate TCs, «Radio Dieciseis» IDs and mention of Grecia and actual frequency of 1590. Local electrical QRM, SIO 342. This is listed under 1600 in '94 WRTH, but is unequivocally on 1590
- MEXICO Capital R. voz, XEVOZ, México, MAR 18 0408 - «Capital» ID, ads, then faded away 432
- 1599.8 COSTA RICA? unID, MAR 19 2132 - Ad, possibly horse racing results, more ads. but could not discern an ID. Verv weak and low het. SIO 242.

**RADIO**  
**WRDM 1550 AM**  
COVERING CENTRAL CONN. & WESTERN MA  
886 MAPLE AVENUE • HARTFORD, CT 06114

Thanks to Eric, Jean, And Mark for their contributions. See you at the convention! 73s

***Now and Then* John D. Bowker**

**Dial changes in this listening area since 1932**

**NASHUA, N H**

**Data provided by Bruce Conti**

1932

WFEA-1370

## 1950

MMLR-610

006 - MILCOM

$$\text{NCNH} + 1250$$

WFEA-1370

## 1980

WGR - 810

008-4400

WYNIKI - 1110

WKB + 1250

1970-1979

USMN-1530

1993

LANGIER + B10

008 + 11111111

1110

WDER-1320

LAWRENCE + 1370

WSMN+1500

## 1994 National Radio Club Convention

September 2 - 5, Labor Day Weekend  
Nashua-Manchester, NH

New Hampshire, *The Granite State*, welcomes the National Radio Club for its annual Labor Day weekend convention. The convention site is central to all that New England has to offer. The mountains, seacoast, and historic Boston are all within an hour's drive.

The convention program has something for everyone. Upon arrival on Friday night, convention goers will receive a souvenir packet loaded with information on how to get the most out of your stay in New Hampshire, including maps and radio station information. The hotel's *Presidential Suite* will be open for NRCers to renew old acquaintances and make new ones.

Radio station tours are scheduled for Saturday morning, to include the WKBR-1250 studio and transmitter site, and the "mini-WLW" WFEA-1370 transmitter site.

Saturday afternoon, a group will be assembled for a tour of the Anheuser-Busch brewery and Clydesdale hamlet. The entire process is explained on the tour, from grain storage to beechwood aging to bottling. Participants are then invited to a beer-tasting. Following the brewery tour, it's a short walk through beautiful flower gardens to the Clydesdale hamlet, to see the workhorses that have become a Budweiser trademark.

Saturday night is reserved for the traditional banquet and auction. Banquet guest of honor Mr. Bob Bittner, WJIB/WKBR/WNEB owner and manager, will speak about his experiences in AM radio. Don't forget to bring your bumperstickers, hit lists, coffee mugs, T-shirts, and other radio-related items, along with DX gear, to donate to the auction and support your NRC! If you would like to donate items to the auction, but will be unable to attend, you may send them to the convention host. Door prizes, including a *Superadio III*, will also be awarded.

John Bowler has arranged for some informative seminars on Sunday with topics of discussion to include reception reporting, phasing techniques, and Beverage construction along with the NRC Quiz. A trip to the seacoast for some TA DXing may also be on tap, as NRCers will be free to step out on their own and discover New England. Shopping in New Hampshire is tax-free; there's no sales tax.

### Convention Hotel/Reservations

The convention will be held at the **Ramada Hotel at Merrimack**. The hotel is located at Exit 11 of the F.E. Everett Turnpike, just north of downtown Nashua. The hotel features the *Sporting Club* restaurant and lounge for breakfast, lunch, and dinner, with room service available. For exercise, try the indoor swimming pool or take a quiet walk along the trails in the Merrimack Forest. The entire hotel is handicapped accessible.

A block of 50 rooms are set aside at special rates of \$45.00 single/double and \$55.00 triple/quadruple, not including 8% tax. Rates and rooms are guaranteed available until August 26. The hotel is now accepting reservations at (800)922-3477 or (603)424-6181. Be sure to mention the National Radio Club convention for special rates.

## Transportation

Air service is available from two convenient points - nearby Manchester Airport, and Boston's Logan Int'l Airport, one hour's drive away via U.S. Route 3. The hotel offers complimentary van service to and from Manchester Airport M-F 8am-10pm, **given 48 hours notice**. Several independent shuttle services operate to and from Manchester, Logan, and Boston's Amtrak train station. Make reservations directly with one of the following, or consult your travel agent.

\* M and L Transportation (617)665-7791 Logan hourly service

\* Minuteman Airport Service (508)649-9829 Manchester, Logan, and Antrak.

\* Hudson Bus Lines

Individuals are responsible for their own room reservations and transportation to and from the hotel. The NRC will not be involved in room sharing and airport transportation arrangements.

### Convention Registration

A registration fee of forty dollars (US\$40.00) per person (spouse US\$25.00, children under 12 US\$16.00), which includes the banquet, is payable in advance. Checks payable to the *National Radical Club* may be sent to NRC Convention, c/o Bruce Conti, 46 Ridgfield Drive, Nashua, NH 03062-1174 before August 26. Please register before August 26, to insure seating for the banquet. Specify whether you prefer chicken or beef. For further info, send a SASE with your specific inquiries to the same address. Hope to see you for the New Hampshire 1994 NRC Convention! 73s

